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TWENTY-SIXTH ANNUAL REPORT

BY

PRESIDENT SCHURMAN

1917-1918

WITH THE COMPTROLLER'S REPORT, AND REPORTS OF THE DEANS OF COLLEGES, THE REGISTRAR THE LIBRARIAN THE SECRETARY, AND OTHER OFFICERS.

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PRESIDENT'S REPORT

FOR 1917-1918

TO THE BOARD OF TRUSTEES:

The President of the University has the honor to submit to the Board of Trustees the following Report which covers the period from November 1917 to November 1918.

During the summer vacation the President made a visit to England and France and the Board appointed Professor Kimball Acting President for the period of his absence from Ithaca, which was from June 19 to September 23. The President desires to put on record an expression of his gratitude to Professor Kimball for his friendly helpfulness and also his appreciation of the satisfactory manner in which he conducted the business at the President's office during the summer.

DEATH OF DR. WHITE

The University lost by death in the course of the year two members of the Board of Trustees and also four members of the faculty (see In Memoriam, page 43). On Monday, November 4, it was also called to mourn the death of its first President, Andrew Dickson White. The funeral was held in Sage Chapel on Thursday, November 7, the eighty-sixth anniversary of the birth of Dr. White. The trustees and faculty attended in a body and other members of the University and the community were accommodated so far as seats were available. At the close of the exercises the remains were committed to their final resting place in the Memorial Chapel. On the day following Dr. White's death the President of the University made the following statement to representatives of the press:

"Mr. White's death will leave a great blank in this community—and in the hearts of his many friends throughout the State and the country. And nothing was more characteristic of the man than the genius for friendship by which he made hosts of friends among people of very different interests and vocations.

"Mr. White's life was in a very unusual degree the realization of men's ideal and desire of what human life should be. Not only had it a suitable material and economic background, but on its inner side it was peculiarly rich, varied, and active. It was devoted to the cultivation of the things of the mind and to the patriotic performance of public service on the higher stage of opportunity. And he made a distinguished record in education, authorship, and diplomacy, which not only his friends but the general public now recall with satisfaction and pride.

"As first President of Cornell University his name, in virtue of his leadership and achievements, is indissolubly associated in honor with the name of the Founder, whose friend and counselor he was. To the present members of the university community he was the object of the highest regard and admiration. Those who enjoyed his acquaintance felt for him also a very genuine affection. And a still wider circle, all over the country, recognized him as a type of the highest American citizenship. So that to-day it may in a very real sense be said that the Republic as well as the University mourns the loss of a noble man and a distinguished public servant, whose memory they cherish with grateful and tender sentiment. And we, his friends and neighbors, who have been so long and intimately associated with him bid him, at the close of a long, full, and honored life, a proud and affectionate farewell."

THE TRUSTEES AND FACULTY

The vacancy in the Board caused by the death of George C. Boldt, on November 10, 1917, was filled by the election of Walter P. Cooke, '91. Mr. Cooke was subsequently elected a member of the Committee on Buildings and Grounds. The vacancy in the alumni trusteeship, caused by the death of Franklin Matthews, was filled by the election on the part of the Alumni of John L. Senior, '01, Jackson, Michigan. The Alumni also re-elected Judge Pound to succeed himself. J. DuPratt White, '90, New York City, was re-appointed a state trustee by the Governor. And the Board itself re-elected R. B. Williams, H. H. Westinghouse, and C. E. Treman to succeed themselves.

From the point of view of university finance it will be instructive to note the number of professors who have taken leave of absence for naval, military, or other reasons. As the State Colleges of Agriculture and Veterinary Medicine are supported by legislative appropriations and the Medical College in New York City is specially endowed, they are not included in this exhibit. Apart from these three colleges the following tables show the number of members of the instructing staff who were engaged in their regular work at the University and also those who were absent. The first table is for the year 1917–1918 and the second table for November 1, 1918. For purposes of comparison a third table is added showing the normal staff in the same colleges for the year preceding America's entrance into the war, namely, 1915–1916. It is important to note that the tables show, first, that in the organization of the instructing staff for the year 1917–1918 the number was considerably reduced below that of 1915–1916 and again in the organization for the year 1918–1919 the staff was reduced below that of 1917–1918 and, secondly, that in both these years after the staff as thus reduced had been appointed a considerable number withdrew, most of them to engage in naval, military, or other public service.

1917–1918

	Physical and Military Education		Arts and Sciences		Law		Medical (1st year at Ithaca)		Architecture		Civil Engineering		Mechanical Engineering		Total	
	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent
Professors	2	0	43	6	4	1	4	0	4	1	5	1	6	5	68	14
Assistant Professors	0	0	35	6	1	0	1	1	5	0	9	3	12	5	63	15
Lecturers	1	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0
Instructors	2	0	37	15	0	0	3	1	0	2	3	1	21	10	66	27
Assistants	23	9	72	13	0	0	7	2	1	0	0	0	19	2	122	26
	28	9	190	40	5	1	15	4	10	3	17	5	58	22	323	82
	37		230		6		19		13		22		80		405	

NOVEMBER 1, 1918

	Physical and Military Education		Arts and Sciences		Law		Medical (1st year at Ithaca)		Architecture		Civil Engineering		Mechanical Engineering		Total	
	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent	Serving	Absent
Professors	1	1	44	8	3	2	4	0	4	1	5	1	8	3	69	16
Assistant Professors	0	0	32	8	0	1	1	0	4	1	6	6	11	3	54	19
Lecturers	0	1	2	0	3	0	0	0	0	0	0	0	0	0	5	1
Instructors	3	1	28	5	0	0	2	2	1	0	3	1	12	0	49	9
Assistants	1	1	43	0	0	0	2	0	0	0	0	0	7	1	53	2
	5	4	149	21	6	3	9	2	9	2	14	8	39	7	230	47
	9		170		9		11		11		22		46		277	

1915–1916

	Physical and Military Education	Arts and Sciences	Law	Medical (1st year at Ithaca)	Architecture	Civil Engineering	Mechanical Engineering	Total
Professors	3	52	5	3	6	5	11	85
Assistant Professors	0	37	2	2	4	13	12	70
Lecturers	0	5	0	0	0	0	0	5
Instructors	2	55	0	4	3	13	46	123
Assistants	20	71	0	7	0	0	14	112
	25	220	7	16	13	31	103	395

STUDENT REGISTRATION, 1917–1918

The total number of regularly matriculated students in the University between September 1917 and June 1918 (excluding duplicates) was 4082. To reach the total attendance the following must be added: third term Graduate School 39, third term Agriculture 54, third term Mechanical Engineering 86, third term Architecture 11, short winter Agriculture 190, Summer Session (1917) 1252. If these figures (duplicates being excluded) are added to the preceding total the whole number of students registered in the University for the year 1917–1918 is 5297.

The following table shows the distribution of regularly matriculated students among the different colleges of the University between September and June, and the figures for the preceding years are given here for the purpose of comparison.

Year	Graduate School	Arts and Sciences	Law	Medicine	Veterinary Medicine	Agriculture	Architecture	Civil Engineering	Mechanical Engineering	Total Exc. Duplicates
1914–15	394	1294	245	205	123	1670	163	480	927	5345
1915–16	482	1424	243	216	159	1704	166	450	942	5656
1916–17	468	1483	255	205	157	1565	168	409	955	5549
1917–18	278	1262	193	210	108	1068	91	260	690	4082

STUDENT REGISTRATION, NOVEMBER 1, 1918

The following table shows the registration of students at Ithaca and their distribution among the different colleges on November 1, 1918. The figures for November 1917 are also given for purposes of comparison.

	Nov. 1, 1917			Nov. 1, 1918		
	Men	Women	Total	Men	Women	Total
Graduate	186	42	228	111	48	159
Arts and Sciences	808	408	1216	736	442	1178
Law	174	12	186	121	11	132
Medicine	138	36	174	144	38	182
Veterinary Medicine	103	0	103	67	0	67
Agriculture	728	287	1015	391	258	649
Architecture	82	7	89	37	7	44
Civil Engineering	230	0	230	264	1	265
Mechanical Engineering	641	2	643	845	7	852
	3090	794	3884	2716	812	3528
Duplicates	20	5	25	36	12	48
Total	3070	789	3859	2680	800	3480

Of the 3480 students registered in the University on November 1, 1918, 2037 were old students and 1443 new students, mainly freshmen. In this total enrollment there are exactly 800 women students. Of the men students (2680) between 1600 and 1700 are members of the Students' Army Training Corps (see pages 10–12). Of the 800 women students exactly 700 are enrolled in the College of Arts and Sciences and in the College of Agriculture.

THE ADVISER OF WOMEN

There is a special advantage which the women students enjoy this year. The office of Adviser of Women, which was in 1916 put upon a new basis securing to the incumbent a seat in the University Faculty and other adequate recognition, has been for the first time filled by a permanent appointment. In June the President nominated Miss Georgia L. White for the position and the Trustees unanimously confirmed the nomination. Miss White has unusual qualifications for the office of Adviser of Women at Cornell University. She took her Ph.B. here in 1896 and after two years of post graduate study here and one in Germany she also took her Ph.D. degree, in 1901. Dr. White was for a number of years a member of the faculty of Smith College, in which she gave instruction in sociology, and from 1913 to June last she was Dean of Home Economics and Dean of Women in

the Michigan Agricultural College. It may also be added that Dr. White enjoys the esteem and confidence of the members of the faculty as well as of the alumnae who are personally acquainted with her or who have kept in touch with her work. She will be able to render to the women students of the University an important service not less essential than that performed by the teacher, yet distinct from it and supplementary to it.

In order that students may have easy access to the new official, a centrally located cottage on the Campus—the one formerly occupied by Professor Babcock—has, on the recommendation of the President, been fitted up for her occupancy. It is provided with public offices on the first floor. It is believed that this cottage, which has been designated the Adviser's House, will henceforth be a place much frequented by the women students of the University. The Adviser of Women should become an important factor in the life of the University as the guide, friend, and helper of women students, and the President hopes they will adopt the practice of consulting her freely. The service she can render them will be the measure of the success which it is possible for the Adviser of Women to achieve.

STUDENTS' ARMY TRAINING CORPS

The Act of Congress of August 31, 1918, having extended the Selective Service Law to include youths from eighteen to twenty years of age, the War Department organized a Students' Army Training Corps and made contracts with several hundred colleges and universities in the country to receive designated groups of these young soldiers who satisfied their entrance requirements and give them special academic and military training, the War Department itself paying the cost of lodging, board, and tuition. The quota finally agreed upon for Cornell University was 1700. Those who are already twenty years of age may have a three-months' course in the institution; those who are nineteen years of age, a six-months' course; those who are eighteen years of age, a nine-months' course. The academic year has been divided into terms of three months each. The contract with the Government does not extend beyond June and there is still some uncertainty as to how the places of students who are called away at the end of December and at the end of March, respectively, are to be filled. And there is the possibility that the vacancies may not be entirely filled or even filled at all. On the

other hand, now that peace has come, the contract might be modified and all the members of the S. A. T. C. left at the University till June. A daily programme of work for the S. A. T. C. students has been prescribed which in addition to class room work includes two hours for military training and two hours of supervised home study.

The problem of messing the members of the Students' Army Training Corps was solved at Cornell by assigning to them the cafeterias in Cascadilla Hall and the Home Economics Building. The problem of quarters was solved by using the fraternity houses which were voluntarily offered for that purpose by the respective organizations to which they belonged. Fraternities as such disappear for the time being. The fraternity houses have become barracks and they are occupied, according to their size, by groups of twenty-five, fifty, or seventy-five S. A. T. C. men who live under strict military discipline. The University has executed a lease of simple form with each of the owners of fraternity houses and the University operates the houses so leased, drawing upon the allowance which the Government makes for the housing of student soldiers and paying pro rata to the fraternity houses what remains of this allowance after expense of operations is discharged.

To adapt the instruction given in the University to the needs of the S. A. T. C. men was a problem more perplexing than that of providing quarters and mess. The Committee on Education of the War Department had laid out certain curricula. The men of the Corps are assorted in five groups and for each group there is a distinct programme of study. The groups are (I) infantry and artillery, (II) air service, (III) ordnance and quartermaster corps, (IV) engineer corps, signal corps, and chemical warfare service, and (V) transport service and tank service. For Group IV the colleges of engineering and the department of chemistry have arranged special programmes which the Committee on Education has approved; those programmes occupy two years, or eight terms of twelve weeks each. The programmes of men of other groups contain certain "essential subjects". Two requirements common to all programmes are military instruction and instruction on the causes and issues of the war. Other subjects "essential" to one group or another are military law and practice, hygiene and sanitation, surveying and map making, map reading and navigation, elementary physics, modern ordnance, business management, and trigonometry. The "allied subjects" from among which the student may fill out his schedule include modern languages,

history, international law, and most of the main branches into which the study of science commonly is divided.

The problem of making satisfactory provision for this instruction was further complicated by the fact of the establishment at Cornell by the Navy of a training unit of 310 men and by the Marine Corps of a section of 170 men.

All the members of the S. A. T. C. have satisfied the entrance requirements of the University and are enrolled as regular students.

OTHER SOLDIER SCHOOLS AT CORNELL

The University is providing instruction for other groups of army men who are not matriculated as students. The earliest of these is the School of Military Aeronautics, the foundation of which was described in the Report for 1916–1917. The school has had an enrollment during the past year of several hundred students; and the authorities of the War Department have requested the University to prepare for the enrollment this year of as many as a thousand. In accordance with this request the University has reserved Cascadilla Hall, in which in the past it leased the rooms to its own students, to accommodate the increasing numbers of men who are to be sent to the School of Aeronautics. At present the smaller numbers of the school are housed in the Drill Hall. It is expected that the temporary mess hall, which the University constructed last year for the use of the school, will be sufficient to accommodate all those who are enrolled in the future.

There is another non-collegiate group of army men for which the University is providing instruction. The War Department found it necessary to instruct army men as auto mechanics, machinists, blacksmiths, tinsmiths, carpenters, bench wood workers, electricians, horseshoers, and asked the universities and technical schools of the country to aid them in performing this work. A course of eight weeks was laid out and the instruction demanded was of the most practical character. As the result of negotiations conducted last spring the President was able to announce in June that Cornell University would take a group of 320 of these army students. Throughout the summer they were housed in Cascadilla Hall but they have been moved to Baker Court and Founders Hall and a special mess hall has been constructed for their use on an adjoining lot.

In addition to these vocational students the University has, in response to the request of the Washington authorities, agreed to

establish a special school for radio engineers and in this school about 60 are already enrolled. The members of this group, which is planned to contain 450 members, have quarters and mess along with the vocational group just mentioned.

CORNELL MEN IN THE MILITARY SERVICE

Complete returns of Cornell men who have enrolled in the Army or Navy are as yet not available. The University has, however, established a bureau of War Records and entrusted the Secretary of the University with compiling them. A mass of information about men in the Army and the Navy has been secured and is now being recorded and indexed in the Secretary's Office. From the returns made up to September 1, 1918, which, it must be repeated, are far from complete, it appears that more than 5200 Cornell men are enrolled in the military and naval service of the United States. Of these there are approximately in the United States Army 3720 and in the United States Navy 1100. About 400 others are in civilian occupation directly related to the military establishment. A most interesting fact disclosed by these records is that more than half of the Cornell men in the uniformed service are commissioned officers: in the army alone the proportion of officers is about fifty-five per cent. May not this fact be regarded as a demonstration of the value of the education, including military training, which Cornell University has given?

The war, alas, is taking its inevitable toll of the lives of these young men. The sympathy of their teachers and friends and of all the members of the university brotherhood goes out to families who mourn the loss of these devoted and patriotic young men. But there is some consolation in recalling that they have died for their country and for the noblest cause for which men have ever fought since history was written. While the University mourns for its sons it is also proud of them. And they not only reflect honor on their Alma Mater, but their heroism ennobles her. The President hopes that the name of every Cornell man who loses his life in this great world war will be perpetuated for all time by some suitable memorial on this campus.

COMPULSORY AND FREE STUDY

The war has turned the colleges and universities of the country very largely into institutions for the training of officers and soldiers. Radical changes have been made in the terms, the hours, the courses,

the methods of instruction, the housing and messing of students, the supervision of studies, the military and physical training of the men and the regulation to that end of intercollegiate athletics. Teachers who in the past have restricted themselves exclusively to their own specialty are to-day giving instruction in other fields which they happen to have cultivated but in which they make no pretence of being experts. Only in this way has it been possible, in the absence of so many professors and instructors for military, naval, or other public service, to secure the necessary staff of instruction. And undergraduates leaving as they do for more specialized military training at the end of every term of three months with a constant incoming of new men to fill the vacancies will keep the colleges and universities in a state of flux. The institutions present a very different appearance and live a very different life from the stereotyped countenance and functioning of former years. Nor is any change more marked and fundamental than the substitution of military compulsion for personal freedom.

It will be strange if after the war our colleges and universities do not gain some permanent advantages from their military experiences. Yet they cannot be expected to adopt, for it is incompatible with their essential spirit and object, the military principle of the compulsory regulation of the life and activity of the students. A university is a place of freedom alike for students and teachers. It is a place for the free growth of mind. It is a place where young men and women, taking their lives in their own hands, struggle upward towards larger knowledge, more complete mastery of themselves and their powers, more light, more insight, and greater self-knowledge and self-control. The processes of education are the mainfestations of the free life of the spirit. All external control is alien to it.

The intellectual vices of the average college student before the war were notorious. Yet compulsion and universal supervision of the student are not the method of developing free personality and responsible manhood. A substitute must be found. And that substitute is the conscientious recognition on the part of colleges and universities of the duty of maintaining and enforcing high standards of work and education. That rule has a two-fold application. In the first place it calls for competent, skilful, inspiring, and thoroughly devoted teachers. And in the second place, it demands that, if undergraduates are not to be constantly controlled like children or supervised like soldiers, they shall not abuse their freedom and neg-

lect the priceless opportunities which good fortune and the beneficence of the public have combined to offer them. It is written that if a man will not work neither shall he eat. And if a youth will not study he should be banished from the academic table. Good teachers inspiring and encouraging good students, with the inexorable exclusion of the unfit, is all we need to bring our colleges and universities up to the ideal of places of serious study. And the reform cannot be too promptly initiated. For the shallowness, sloppiness, superficiality, and inaccuracy of much of our higher education, and the careless habits of students in regard to work, order, neatness, punctuality, and other matters of economic and even ethical importance are a scandal to the nation and a disgrace to our institutions of learning.

MILITARY TRAINING AND ATHLETICS AFTER THE WAR

Before the war Cornell University required military training of all freshmen and sophomores for three hours a week. The friends of the University have been proud of the record of its Military Department which year after year has been crowned with the recognition of the War Department as a "distinguished institution." And the fact that over fifty per cent of all Cornell men in service are officers shows strikingly the value of that training. But the training, it is now seen, is inadequate. It needs to be extended to all students in the University; it should be expanded and enriched; it ought to be combined with athletic activity in a way to utilize and exploit the young man's natural interest in games and sports; and the completed system of military and athletic training should take the place of the unhealthy intercollegiate athleticism which has usurped so large a place in the life of our colleges and universities, and which not only seriously interferes with their real work but tends to pervert their essential objects and to misinterpret them alike to the general public and to themselves. The President hopes after the war to see at Cornell University regular military and athletic training for all students for a period of not less than one hour for five afternoons of the week with intra-mural competition between class and class, college and college, and other existing units. The whole could, it is believed, be organized and conducted in a way that would gratify the natural impulses of young men, awaken and sustain their interest, and so displace the vast anomaly of organized intercollegiate athletics with its handful of highly trained players, its show games, its elaborate and costly agencies and paraphernalia, its gate-receipts, its serious interference

with the work of students, its betting and gambling, and its conspicuous misrepresentation of the proper function and service of the universities in the life of the nation and humanity.

FRATERNITIES

There is a third reform which the interlude of militarization of the University should make it possible to accomplish. The President has often called attention in these annual Reports and in other communications and addresses to the grave problem which the fraternities, with all their advantages, create for the University. These societies offer delightful homes to students which, in the existing paucity of University Halls, is a quite invaluable service to the University; and, in the society houses occupied by congenial groups of students there are many opportunities for social intercourse, for good fellowship, and, both casually and by design, for mutual improvement and education. But, as Emerson has well said, men pay some price for every good they enjoy—the price being often the good in a form so extreme that it becomes noxious, as courage carried to the highest pitch becomes rashness or even foolhardiness. Now the peculiar excellence of a fraternity is the association of a congenial group of students in a common life and an intimate fellowship. Herein, by an almost inevitable exaggeration, lies its danger. Devotion to, and absorption in, the life of the fraternity—not on the official, but on the social side—easily and almost unconsciously undermines the student's will to work and study. And yet it was for the sake of study that he came to the University! The lesser loyalty obliterates the greater! And the end too often is that the "good fellow" of the fraternity is "dropped" by the University. A tragedy for all three!

The need of reform is crying. If the method is not obvious, the end to be attained is clear as daylight. The fraternity must be baptized with the spirit of the University. The University stands for truth and knowledge; so must the fraternity.. But you cannot get truth and knowledge without strenuous intellectual effort. The University therefore demands hard study; so must the fraternity. And until the fraternity recognizes this fact its relation to the University will be ill-adjusted.

How to make the fraternities centres of intellectual life and activity? That is the great problem. If it is not solved, fraternities, in spite of all the delightful opportunities and experiences they furnish

to students, are not likely to survive as permanent institutions in the American educational system.

Perhaps a solution may be found in history. The Colleges at Oxford and Cambridge were originally undergraduates' lodging houses disconnected officially with the University. The first step in their transformation was the introduction of a graduate master or tutor or "coach". But the undergraduates still retained control. The new official was there to aid them with their home study. Why should there not be a similar tutor in each of our fraternity houses? He would be at the same time an intellectual influence, though not clothed with any university authority. And such tutors in neighboring houses, if they represented different branches of science and learning, might co-operate and through a combination of groups from different fraternities easily cover the principal subjects—or at any rate the most difficult subjects—of the curriculum. Thus there would spring up under the most natural conditions something like the present tutorial system of Oxford—a system which does more for the individual student, whom it brings into close personal contact with one teacher, than any other system in the world.

Will not the graduate members of fraternities consider this suggestion? They will not misunderstand the spirit in which it is made. The President's desire is to retain the fraternities with all the good they bring to the University but he clearly sees that the first condition necessary to that end is the inoculation of the fraternities with the spirit, object, and aim of the University.

THE UNIVERSITY AND DEMOCRACY

Nowhere in the world are conditions so favorable for a perfect democracy as in a university. The students are young men and women characterized by strong sense of equality, of fair play, and of self-respect and independence. No other group of persons are less impressed with adventitious circumstances or artificial elements in rating their fellow men. And the material, economic, and social surroundings are, if not as positive as the psychological factors, at least more favorable to democracy than they are like to be in any other grouping of Americans brought together for any purpose. Nevertheless it is on this side that the danger to the democratic life and spirit of a university exists.

Democracy is undermined, is at any rate menaced, by inequalities resulting from rank and title, from possessions, from social classi-

fication. In America, the first two of these have no existence. The danger to American universities comes from wealth and the social status which wealth, especially wealth long enjoyed, almost inevitably confers. Neither is a ground for personal preference or distinction which a university can and should recognize. And if the sons of rich or socially important persons gain from those circumstances any advantage over their fellow-students—apart from the bare fact of having fuller purses—the university to that extent yields its democracy.

Yet the principle is easier to state than to apply. The impecunious student—simply because his purse is empty—cannot live in the more attractive rooms or perhaps attend pleasant social functions. So much inequality seems unavoidable. And it is not really inconsistent with self-respect and genuine democratic feeling on the part of either the rich or the poor student. The same thing is true regarding the necessity of manual labor for the youth who largely supports himself by his own toil.

Cases like these do not in practice make much difficulty. The trouble comes with the massing of groups of the more prosperous students in superior quarters and the setting up of a superior style of life. This danger inheres in those private residential halls or dormitories with their luxurious appointments with which some universities are afflicted. To some extent it inheres in the fraternity system, but here is it largely controlled by the large number of fraternities and by the intermixture of students of all degrees of wealth and poverty in these organizations. At Cornell the chief menace to democracy formerly lay in the lack of suitable residential halls for the men who were not members of fraternities, and the contrast between their private lodgings and the comfortable houses which the fraternities possessed. Obviously the remedy was a systen of good residential halls. And thanks to the generosity of Mr. George F. Baker and also of the Alumni a fine beginning of that system has already been made. May good fortune attend the progress and completion of that system! No youth, however poor, who occupies a room in one of those beautiful and well appointed halls, will ever envy the comrade who lives in a fraternity house. In that way the provision of residential halls has strengthened the democratic spirit and facilitated democratic life at Cornell University.

Other influences prejudicial to democracy at our universities would disappear if hard study were the rule for all students and education

and the development of the intellectual life were recognized as the real *summum bonum*.

There is one outstanding inequality which with the amelioration of social conditions will, it may be confidently expected, soon be removed. The children of the poor, not only in the schools, but in the universities should have equal opportunities with the children of the rich. This, however, is impossible without the provision of scholarships for their tuition and partially at least for their support. The modern state cannot much longer neglect this obligation. Fortunately at Cornell University, there are several hundreds of scholarships carrying free tuition in all divisions of the University and there is no charge to New York students for instruction in the State Colleges of Agriculture or Veterinary Medicine. These provisions are excellent so far as they go; but they need to be extended and enlarged so that poor boys and girls of superior parts may procure the highest education without devoting a large part of the time needed for study to the task of self-support. The socializing (not to say socialistic) spirit of the time may be expected soon to achieve this necessary reform. And the influx of this new element—the coming to the universities of a considerable number of highly-endowed and ambitious boys and girls from the homes of the poorer classes of the community—would vitalize the universities with a new, healthy, and vigorous life. One result would be that it would then be all the easier to exclude (as recommended already in this Report) all undergraduates who did not take their work seriously and who failed to satisfy those high intellectual standards which every University should maintain.

The University is dedicated to science and letters. It is a place of study, a place of education, a place of productive scholarship and research. But it is a republic of science and letters. And it must guard its democracy as the very jewel of its soul. Cornell has always set great store on freedom, independence, democracy alike for professors and students. May all the members of the University have open minds and hearts to the new applications of democracy which are likely to be made after the war!

THE HUMANITIES AND HUMANITY

With Greek and Latin generally elective in American universities no one can pretend that too much is made of the Classics. More and more, as time goes on, it will be realized what valuable ideals

and lessons are contained in Greek and Roman civilization and history for the free democracies of the modern world and above all for America. While it is not necessary or desirable that all undergraduates should study Greek and Latin, it is highly important that ample opportunities be provided for their study and that select students should be encouraged to pursue them. Through these few who will aim to master all that it best in what has come down to us from the greatest minds of two great races and to comprehend their life and institutions the vitalizing influence of classical studies will extend to larger educated circles and gradually to the uninstructed multitude.

The war has revealed grave defects in the teaching of modern languages. How ignorant America has remained of foreign countries and their people! How little Americans know not only of enemy nations and their lands, but of France and the French, of Belgium and the Belgians, of Italy and the Italians, and of all the Balkan peoples and countries! If we are to understand and appreciate contemporary humanity we must study their languages, literatures, history, philosophy, politics, social and economic institutions much more intensively than has ever yet been done; and the languages and literature of a nation must not be divorced from these other phases of its life—from its industry, economics, politics, etc.—as was universally the case in the past.

From the point of view alike of practical utility and of humane culture provision must be made in American universities for such modern studies of the French, German, Spanish, and Italian peoples and countries. This knowledge is indispensable for our industry and commerce, for our scientific instruction and information, for our public service, for our conduct of international relations, and for the acquisition by the American people of all that is best and highest in the achievements and institutions and ideas of other peoples. Now that the whole civilized world has become a co-operative laboratory of art, science, technology, politics, and economics, Americans cannot afford to remain in ignorance of the intellectual and practical treasures accumulated by other great nations and especially, not to mention the English-speaking nations, by the French, Germans, Spanish, and Italians.

Such modern studies are needed both for practical purposes and for national enlightenment and education. And in the future they must be more wisely and comprehensively organized than they have

been in the past and given every opportunity and encouragement. American Universities must graduate increasing numbers of students who shall become experts in the language, institutions, economic capacities and conditions, politics, history and law, as well as in the creative work of art, literature, and philosophy of at least one of the great nations of the modern world. The student, for example, who is making a special study of French should study French History as well as French Literature,—and not only that, but he should also study French Politics and Government, the social conditions and institutions of the country, and its larger economics, including its physical geography, its products, industry, trade, and finances. What a boon, for example, it would be to the United States if at the close of the war there were scores or hundreds of young Americans who possessed such knowledge and training with reference to Spanish America!

What is demanded is that the Modern Humanities—which more and more are taking the place of the ancient Classics—shall fully and truthfully reveal to us Modern Humanity as it has developed in the great nations of the modern civilised world. And this comprehension of other nations can be achieved only by studying as an interdependent whole their languages, their intellectual and artistic achievements, their social and political institutions, and the organization and arrangement of their industrial and practical life. To neglect the economic side of life is foolishness. But, as has well been said, "to recognize no other is to degrade humanity."

In connection with this programme of studies of foreign nations the President desires to call attention to the plan for a school of commerce at Cornell University outlined in his Report for 1915–1916, (pages 46–49).

THE CULTIVATION OF SCIENCE

"What people called Applied Science," says Huxley, "is nothing but the application of Pure Science to particular classes of problems." There can be no applied Science till there is Science to apply. However marvelous an invention may be, it consists of an application of some antecedent scientific discovery. The technical development must build on scientific knowledge. And what is more, that scientific knowledge was not acquired for the purpose of making any particular invention. Science is enlarged by the observations and reflections of thinkers and experimenters who are interested solely in the dis-

covery of new truth. And these scientific men are so far from aiming at practical results that they do not themselves know in advance where the threads of their investigations may conduct them; they cannot anticipate the possibilities ahead of them; they march forward, following the way as it opens out before them, with no idea whither it leads. It is preeminently true of the course of scientific research that one "cannot tell whence it cometh or whither it goeth." It is the highest effort of the human mind—a kind of divine creative activity—and it is a law unto itself.

This gift of scientific research is the most powerful weapon bestowed upon mankind for the solution of the great and difficult problems that beset and oppress the human race. Itself a disinterested and abstract activity, its discoveries when applied to particular classes of facts have led alike to industrial prosperity and to the betterment of the race. Yet if pure and applied science are both essential to the material prosperity of the nation pure science may be developed by itself alone whereas applied science will languish if pure science is neglected. And pure science must be constantly cultivated and enlarged if mankind is to progress. It will never be possible for men to say that they have enough pure science and may henceforth devote themselves to applying what they have. Far more profound truths than any yet discovered will always remain to be explored. And the surcease of scientific research would end in intellectual sterility and the stagnation of civilization.

Nothing is more important for the progress of civilization in the United States than the generous, hearty, and unhampered devotion of thinkers and investigators to the cultivation, advance, and dissemination of pure science. After the war there will be great eagerness in extending the application of scientific knowledge to industrial developments. And that reform, which is important and necessary, will easily justify itself to the American public. But pure science is "caviare to the general." And America has not yet produced her share of it. It is high time she recognized her obligations. The danger of the present time is that in the just and proper demand for the enlargement of applied science and the improvement of technical schools and colleges, the superior and all-essential prior claims of pure science may be disregarded.

Indeed it is not easy to formulate sound plans for the development of pure science. It has been well said that it is as difficult to organize the producton of the highest type of research in pure science as it

would be to organize a method of producing great poems. In science as in art creative genius goes its own way; and for one lucky effort a thousand may be fruitless. What then can be done? Clearly one cannot hope to get great discoveries simply by paying for them. On the other hand money is essential to build laboratories, to provide efficient equipment, and, most important of all, to ensure the investigator free time for original research. In the past discoveries have for the most part been made in the laboratories of universities and this is likely to continue to be the rule in the future. The great blight on research in American Universities is the amount of teaching and routine work which falls to the professor. He comes tired and jaded to a function which calls for the exercise of his best powers in their freshest and most energetic condition.

Cornell University has won an honorable place in the annals of American Science. Nothing is more important for the period of reconstruction after the war or for the whole future of the institution than a new consecration and a whole-souled devotion to this splendid service. No doubt additional funds will be needed to improve equipment and furnish new facilities and above all to liberate investigators by providing them with teaching assistants; but the supreme condition of success in pure science will be men with a gift for research, a conviction of its value, and an unwearying and undiscourageable devotion to the work. Such men are not wanting in the faculty of Cornell University, which also possesses some excellent modern laboratories with a good deal of equipment. Here is a foundation at least for the erection of a worthy temple of Pure Science after the war.

REORGANIZATION OF ENGINEERING COLLEGES

As to the organization of the University in general, it is well adapted to its work. It provides for thorough representation of every interest—both academic and business; it combines a differentiation and delegation of functions to expert committees, councils, and faculties while retaining a control in the Board of Trustees and University Faculty; it reserves administrative and executive functions for the President, Comptroller, and other officials; and it operates with smoothness and efficiency and produces results which seem satisfactory, not only to the academic community but also to the general public. There is, however, one flaw in the organization due to historical circumstances which it is now time to correct. It is not, properly speaking, a defect in organization, but an unnecessary

duplication. The existence of two engineering colleges at Cornell however easy to understand from the history of the University is, from the point of view of scientific organization, a superfluity and, therefore, like every unnecessary organ, a disadvantage to the system.

This matter has been the subject of careful consideration during the past twelve months by a committee appointed by the Board of Trustees consisting of H. H. Westinghouse, Chairman, R. H. Treman, James H. Edwards, J. DuPratt White, and Ira A. Place along with the Deans and the members of the Conference Committees of the faculties of the two engineering colleges. In the report of this committee, which was presented to the Board in May last, the finding was as follows:

> "On the paramount and fundamental question as to whether or not the present segregated status of the Engineering Colleges should be retained, or a plan of consolidated Engineering Education be substituted therefor, it was found that the views of the Faculty and Trustee members of the Committee, independently arrived at, were in substantial accord as favoring in principle the consolidation of the several existing engineering departments into one department of Engineering Education, a course apparently justified by the experience of other comparable educational institutions."

The Board of Trustees, after receiving this report, approved the finding of the Committee.

There are three reasons, any one of which is in itself conclusive, in favor of consolidation of the two engineering colleges.

First, as has been explained, the duplication of administrative units in the Department of Engineering at Cornell University is indefensible from the point of view of sound, economic, and efficient organization. Undoubted gain in administrative efficiency and in economy of equipment and cost of teaching would result from the consolidation of the two colleges.

Secondly, the interests of education also demand a unification of the two colleges, for a large part of the course in Civil Engineering is substantially identical with the corresponding part of the courses in Mechanical, Electrical, or other branches of engineering. And it is important from the point of view of the teacher that this common core of education should be conducted and administered as a unit for all branches of engineering. Furthermore, the sharp lines which formerly existed between civil engineering and other branches of engineering are gradually disappearing and it is now recognized that the underlying principles in every department of engineering are the same, that all kinds of engineering are closely allied, and that sound

engineering education should lay stress on fundamental principles rather than on specialization in certain fields.

Thirdly, the present war will result in radical changes in the practice of all branches of engineering. The educational methods of schools of engineering will therefore need modification and readaptation to the conditions of the industrial world. And in this necessary work of reconstruction Cornell should not be artificially hampered by the perpetuation of two organizations of engineering education, where in the nature of the case only one is necessary or desirable.

Applied Science and Engineering have played such a prominent and decisive part in the war that the public which has witnessed their potency for national preservation and supremacy in a great international struggle will, it is believed, not be indifferent on the coming of peace to their value and efficacy for national well-being and progress. Certainly these subjects will need financial encouragement in the future on a far larger scale than it has been accorded to them in the past. It was shown in the *Scientific Monthly* for November 1915 that while the annual value of manufacturing industries in the United States developed from patented scientific inventions alone was about four hundred million dollars, the total income for all purposes of all the higher institutions of learning in the country was only about ninety million dollars. Think of the incalculable amount which the electric motor alone has added to the wealth of the world. Yet all electric motors have come from that magnet going round an electric current which Faraday called his wife into his laboratory to see on Christmas Day, 1821. Surely the American people, after the war, will devote a more generous share of the industrial profits of applied science to the encouragement and development of schools of engineering, both for the improvement of instruction and the enlargement and vitalizing of research. Cornell University has already a good reputation in Engineering and in the approaching days of reconstruction its ambition is to lead in the reform, readjustment, and advancement of engineering education and investigation in America.

In the reorganization of engineering education the chief problem will be the better adjustment of the curriculum to the new demands and needs of the activities of the industrial world. There is one guiding principle that may be safely formulated in advance. For experience and reflection have alike convinced educators and engineers that the best engineering education is a broad and sound training in general

engineering science rather than expertness in some narrow and highly specialized field. Hence in working out the curriculum it will be necessary to resist the ambitions of competing departments to exalt their subjects and determine first of all what is essential for the education of the engineer under the existing conditions of science on the one hand and industrial practice on the other. The magnification and glorification of the department must yield to the demands of the best possible engineering education for the student. In other words there must be co-operation of departments and co-ordination of work all subject to the fundamental criterion of the student's need. And if heads of departments are not unselfish enough and impartial enough to perform this educational service with sole reference to the student's best interest it will be necessary to call into conference along with them the most thoughtful leaders of the engineering profession. In some way the problem of the curriculum must be settled on the sole ground of what is best for the education of the student, that is, the coming engineer. Of course there must be various types of programmes especially in the latter part of the course for students of various talents.

FEDERAL SUBVENTIONS FOR RESEARCH

Under the series of acts of Congress which began with the first Morrill Act of 1862, which was followed by the Second Morrill Act, the Hatch Act, and the Adams Act, and of which the latest manifestations are the Smith-Lever and the Smith-Hughes Acts, the Federal Government appropriates funds from the Treasury of the United States for agricultural education and research including extension teaching and local demonstration and experiments in each of the states of the Union. The condition of these appropriations generally speaking is that the state shall make equal appropriations for the same object. This condition was as wise as the policy itself which, in the light of the experience of half a century, may safely be pronounced a piece of high constructive statesmanship.

It has already been recognized by thoughtful publicists and educators that this policy should be enlarged and extended. Any additional appropriations that may be needed for the development of agricultural science and education and for the dissemination of useful results and wise practices among the farmers of the country will be money well and fruitfully invested. That, however, is not the only extension of the policy which has been demanded in recent

years. The appropriation of federal funds for research in engineering, in other branches of applied science, and also in pure science has been advocated by thoughtful and patriotic leaders, and the events of the war have confirmed the wisdom of their position and greatly reinforced their advocacy. America had scarcely entered into the war before the Government appealed to the scientific men of the country to furnish them with scientific knowledge and discoveries for the successful prosecution of the contest. On its material side the war may be described as a conflict of pure and applied science in every field, but especially in the provinces of physics and chemistry.

The value of science to the nation having been so strikingly demonstrated by the war, the American public are not likely to forget or disregard its value, on the return of peace, for the well-being of the American people and the advancement of American civilization. A wise and instructed public opinion will insist that the federal Government grant liberal subsidies to universities for research and investigation in every field of science, pure and applied. It has been already said this will not be any new policy but merely an expansion and intensification of the policy which for more than half a century the nation has practiced in relation to the fundamental industry of agriculture. It is quite possible as it would also seem desirable that in allocating these grants for scientific research the limit should not, as in the case of agriculture, be drawn with the land-grant colleges and universities, but that the faculties of all the first class universities in the country should be utilized in this organized national effort to wrest new scientific discoveries from the world in which we live and about which in the main we are still so ignorant. The entire amount of money needed to equip and vitalize these agencies of research would be very small in comparison with the sums spent by the Government for many other objects less important. And there is no expenditure of money in any field whatever which, in the nature of the case, is certain to produce results so immediately and directly helpful and beneficial to the people on the material and economic side and so certain on the intellectual to enlarge their minds and stimulate their powers.

The war has taught us that many things which have hitherto been left to private initiative must in the interests of the nation be taken over by organized government. In the past, private munificence, on behalf of American education, generous as it has been, has not begun

to make adequate provision for scientific research. The result has been that the resources of American universities have not enabled them to provide the staff and the laboratory equipment necessary either for teaching or research, especially in the new and rapidly developing branches of science. There is no escape from the conclusion that after the war government assistance will be necessary if the universities of the country are to be manned and equipped in any suitable way for carrying on the work of research and investigation in all the fields of science, old and new.

The one danger incident to Government appropriations to universities is Government interference with their work. Neither university education nor scientific research can be conducted upon the dictation or suggestion of any Department of State. And if American universities are to continue to do their work efficiently they must be left free to do it upon their own impulse and under their own direction. No doubt if the Government finds the money for research it has the right to know how the money is spent and consequently the right to call for reports on that subject and if needs be to make inspections. But, however large Government subsidies may be, the universities must retain their full independence and the Government must not in any way attempt to restrict or interfere with their freedom of development.

It is interesting to note that in its programme for reconstruction after the war, the Labor Party of Great Britain fully recognizes and emphasizes the importance of public provision for scientiffic investigation and original research. This programme, radical though it is in character, has created a pronounced impression upon the public both by its comprehensiveness of view and by the fine ethical spirit which pervades it. It would be difficult to find in any programme ever put forward by any political party a more just and adequate recognition of the part played by science in the modern world and the national importance as well as the national obligation of contributing to the advancement of science. "It is," says the programme, "perhaps especially the Labor Party that has the duty of placing this advancement of science in the forefront of its political programme." The Labor Party proposes to use the surplus wealth of the community for the common good. From this surplus it declares that capital will be found to provide for education, for the care of the sick and infirm, and for other humanitarian objects and public improvements. And then with reference to scientific research the programme

makes the following striking declaration: "From the same source must come the greatly increased public provision that the Labor Party will insist on being made for scientific investigation and original research, in every branch of knowledge, not to say also for the promotion of music, literature and fine art, which have been under Capitalism so greatly neglected, and upon which, so the Labor Party holds, any real development of civilization fundamentally depends. Society, like the individual, does not live by bread alone." In the same vein are the following sentences from the closing paragraph of the programme: "The Labor Party has no belief in any of the problems of the world being solved by Good Will alone. Good Will without knowledge is Warmth without Light. Especially in all the complexities of politics, in the still undeveloped Science of Society, the Labor Party stands for increased study, for the scientific investigation of each succeeding problem, for the deliberate organization of research, and for a much more rapid dissemination among the whole people of all the science that exists." And the last sentence of the programme is as follows: "If Law is the Mother of Freedom, Science, to the Labor Party, must be the Parent of Law."

STATE SUPPORT OF AGRICULTURAL AND VETERINARY EDUCATION

The more advanced a people become the greater is their dependence on the discoveries of science and the more insistent the demands they make on scientific workers. Science has but comparatively recently come to the aid of agriculture, and farmers are just beginning to perceive the value of the application of science to their business and to place dependence upon their institutions for teaching and research. One of the most conspicuous changes in American life is the rapid progress which agriculture has made during the past two decades since the work of the agricultural colleges and experiment stations established under public grants has begun to be felt.

The New York State College of Agriculture at Cornell University has experienced the rapid growth incident to the new trend in American country life. The State has provided liberally, although not always adequately, for its needs. During these years of war the State has maintained its appropriations for the normal growth of the institution, except in the matter of buildings for which the Trustees have withheld request until the war is ended. The Legislature, on the recommendation of the Governor, having adopted the policy of providing war emergency funds for the encouragement of the

production and conservation of food to be administered by a specially created Food Commission, the State's established agricultural institutions have not received enlarged appropriations for specific war purposes. The State College of Agriculture has maintained its manifold war endeavors on its regular appropriations except for such special temporary extension activities as have been provided for by emergency appropriations made available by the National Congress. Hence, no persons have been added to the staff of the College who are not needed for its permanent work. Teachers relieved from their classes have aided in the enlarged extension activity. The war situation has not called for measures radically different from those which the College has advocated for the past decade and more; and the programme which the College has been carrying is no less good for peace than for war.

Increased appropriations have come to the College, due partly to the obligation of the State to meet the increasing monies available under the Smith-Lever and Smith-Hughes Acts, the provisions of which the State has accepted; partly to the fact that the State has recently established a State Experimental Game Farm as part of the College, and has created a special appropriation for the investigation of bean production on the request of the bean growers of the State; partly also by the transfer of the farmers' institute work from the State Department of Farms and Markets to the State College of Agriculture by the last legislature; and finally, increases have been made to meet the necessary growth in the teaching, research, and extension activities of the institution.

The launching of the agricultural extension movement has started a new type of rural organization which is almost wholly educational. The Farm Bureaus have represented the organized feature of this movement in New York State. These Bureaus have not only been an extension agency of the State College and of the State and Federal Departments of Agriculture, but but they have in themselves stimulated and organized groups of farmers in the counties for carrying forward the local development of agricultural resources. The war has witnessed the completion of the organization of the Farm Bureaus in this State, and has seen the companion home bureaus organized in more than half the counties. The establishment of these agencies by which the results of the teachings and discoveries of the Colleges, Stations, and Departments of Agriculture are brought home to farmers and farmers' wives reacts inevitably to increase the demands

on these institutions to penetrate ever new fields of investigation. The government's war programme for food production and conservation has of itself unloosed streams of inquiry on farm problems which must be satisfied. Every attempt of the College to apply known principles to the Agriculture of the State unearths more problems requiring careful investigation for their solution.

The New York State College of Agriculture at Cornell University has not yet completed its development, although it has been set well forward on its way. Its chief need now is of additional buildings to house its departments, several of which prior to the war were so congested as to be seriously embarrassing to the work. It is clearly in the interest of the State that it shall complete this institution so that our agricultural interests shall be fully served. The war has brought the entire civilized world to realize with a new intensity the dependence of all the people on a productive agriculture, and it is of the very essence of sound state policy to provide adequately for the support of the agencies for agricultural teaching and research.

There are three considerations that emphasize the value of the work of the New York State Veterinary College at Cornell University. The first is our dependence on animals and their products for food and clothing; the second is the existence of destructive diseases among animals, some of which are being disseminated rapidly while others, that formerly were thought to be negligible, are becoming widespread and destructive; and the third is the safeguarding of the human family from the maladies communicable to it from the dumb creation.

The protection of our flocks and herds is one of the most important economic problems before us. With our growing population we have to recognize in our own State that farming conditions have brought about a reduction during the last ten years of 86,000 horses, 292,000 cattle, and 280,000 sheep. Notwithstanding this diminution in numbers, the total value of the live stock has advanced from $172,000,000 in 1907 to $234,000,000 in 1917, an increase of 26.5 per cent.

The direct losses in this State from the infectious diseases of animals, based on the estimates made by the Secretary of Agriculture, amount to $7,700,000 annually. The communicable diseases, however, constitute a minor part (about 25 per cent) of the losses and a still smaller proportion of the troubles for which the services of veterinarians are required. To have all these affections properly attended, there must be a sufficient number of competent practitioners distri-

buted in the State. It has been demonstrated that animal owners who seek professional assistance as soon as there is any indication of trouble and retain it until the animals are restored, have very little loss from disease. The maximum benefits will come with greater knowledge of veterinary medicine and a closer co-operation between animal owners and their veterinarians.

The direct object of the research work of the College is to ascertain the undetermined but essential facts in connection with the numerous destructive diseases of animals in order to formulate more efficient methods for their control or eradication. The continued researches on hog cholera have resulted in a successful method for combating that disease. The researches that have been under way for several years on infectious abortion have led finally to a procedure that has been successful in restoring badly infected herds to a normal condition. This disease, which is estimated to cause a loss of more than $4,000,000 annually to the cattle owners of this State, can undoubtedly be brought under control if the work continues. The encouraging progress that has been made argues for its continuation.

The College is now able to give a thorough course in veterinary medicine to men enough to supply the need for practitioners in the State and to furnish its quota of scientifically trained men for the federal service. It maintains a laboratory for diagnosis where thousands of specimens are examined annually for practitioners and animal owners. By this means early and accurate diagnosis of destructive diseases are made, thereby enabling veterinarians to apply preventive measures immediately. This has made it possible to check their spread. In 1906, anthrax was disseminated to 84 farms in one county causing the death of many valuable animals. For several years this disease has been checked in the many places where it has appeared and the heavy losses previously sustained have been prevented. Hog cholera, that had become a serious menace, has been held in check through the results of the discovery of the means by which it is spread through market pork.

During the last year the College has furnished, at a price just sufficient to cover the cost of the material, to the veterinarians and live stock owners 15,425 doses of anti-hog cholera serum, 15,400 doses of anthrax vaccine, 6,087 doses of mallein and 70,790 doses of tuberculin. This is a public service which, from its nature, gets little recognition, but its economic and sanitary worth is none the less valuable.

THE CRISIS IN MEDICAL EDUCATION

Between June 1917 and June 1918 death carried off the generous Founder of the Medical College, Colonel O. H. Payne; the first Dean, the trusted and admired leader, the much-beloved Dr. William M. Polk; and the friend and adviser of both, the sturdy and devoted bulwark of the College and the unselfish helper of all its members, Dr. Lewis A. Stimson, the first Professor of Surgery.

Those losses in themselves mark the close of an epoch in the development of the College. They admonish us at the same time of the necessity of making a survey of the present situation of the institution and, as far as possible, a forecast of its future. The President has given much thought to the matter and he has come to the conclusion that the College has reached a turning-point in its history.

The Medical College has a good endowment. It consists of the specific securities handed to the Trustees by Colonel Payne at the time he endowed it with the addition of the $500,000 he bequeathed to it in his last will and testament. The College building is a large, commodious, modern, and well-appointed structure, located across the Avenue from Bellevue Hospital and extending from 27th to 28th Street. The supplementary buildings on 26th Street are also beside Bellevue Hospital, but they are old and badly lighted and are ill adapted to educational purposes. Much more valuable than the buildings is the land on which they stand.

The Faculty of the College is composed of loyal, capable, and in some cases distinguished members. The professors of the fundamental sciences have been chosen for individual excellence from an absolutely unrestricted field. In selecting the professors of the clinical branches it has been necessary to limit the choice to practitioners who happened to have hospital appointments in the city of New York. And fortunate as the result in individual instances has been such a limitation is bound to prove most prejudicial to the interests of the College, which should be free in filling vacancies to select the best men from any part of America or even of the world.

To escape this paralysing limitation of its Faculty the Medical College must control a hospital of its own. And there are other considerations of fundamental importance which lead to the same conclusion. For lack of a hospital under its own control the Medical College is greatly hampered in its educational work and in its scientific investigations. It suffers from being compelled to do its work in separate and water-tight compartments. Yet a course in medicine

more than in any other subject demands a constant and effective interrelationship between the constituent studies. Anatomy and physiology are the bedrock of medicine, but as they themselves depend upon biology, physics, and chemistry, so they lead to pathology and the clinical subjects. In good teaching, therefore, they must be closely associated with the other subjects of the curriculum, but especially with pathology and clinical medicine and surgery. The sphere of medicine consists as it were of two hemispheres: the one made up of the structure and functioning of the normal body—anatomy and physiology; and the other of the functioning and treatment of the diseased body—pathology, the clinical subjects, and therapeutics; and the two cannot be divorced without fatal results to medical education. The teachers of the clinical subjects have a duty in this matter as urgent as that of the professors of physiology and anatomy. As these must keep clinical medicine and surgery constantly in mind, so those must bring the conquests of physiology and pathology into the wards and apply them to the patients; for medical knowledge is complete only when it embraces the scientific as well as the clinical facts of the case. Yet all this co-ordination, which is so indispensable to the teaching of modern medicine, is impossible unless medical school and hospital are parts of one establishment on a single site with a common administration and as closely united in work and spirit as the constituent departments of a school of engineering or of chemistry. This unification of hospital and medical school is equally essential for the prosecution of research in medicine, particularly in pathology and the clinical subjects.

Given the harmonious co-operation of the authorities of medical college and hospital, teaching and research in pathology, medicine, surgery, gynecology, and obstetrics could be put upon a new and greatly improved basis. Hitherto there has been a notable lack of co-relation between pathology and these clinical subjects. Until recently pathology has been taught as a "pure" science in the class room and to some extent in the museum and the laboratory. But it was generally divorced from disease as disease actually appears in patients in the hospital. Now this isolated compartment system must be brought to an end. The pathology of glass-jars must be superseded or at any rate supplemented by the pathology of the sick-bed. The professor of pathology in the medical school must also be pathologist of the hospital and the assistant physicians or the assistant surgeons in the hospital must also be on his pathological staff.

Even his teaching must be done in the hospital itself or in a pathological institute in or adjacent to the hospital. The day when pathology could be taught in a college class room is past. Only through such unification of college and hospital staffs and material resources can the proper co-relation between pathology and the clinical subjects be secured and maintained.

But the greatest reform of all which such unification of hospital and medical school would render possible would be in the teaching of the clinical subjects themselves. The professors of medicine, surgery, and obstetrics are to-day busy practitioners and their duties in the medical college are, generally speaking, a side-issue with them. But no man can serve two masters. And it is impossible for a professor to give much time and thought to teaching and research if he is absorbed from day to day in the demands of a large medical practice to say nothing of his hospital appointment. The only solution of the problem of clinical teaching is to pay the professor adequately for his services. He would then devote the greater part of his time to teaching and research, though it might be an advantage in his teaching work if he retained a modicum of private practice. Primarily, however, such a professor would be recognized as a teacher and investigator and only in a minor degree as a practitioner. But all this would be impossible if the clinical professors are not given control of hospital wards and out-patient departments with ample laboratory accommodations in immediate proximity to these wards for research in the nature of the diseases which the patients bring before them.

This system has long been in vogue in other civilized countries. In Germany the professor of medicine is a hospital clinician and a laboratory director, but not primarily in private practice. The universities with their departments of medicine and the hospitals are both alike state institutions. And however various the interrelation between them the professor is always supreme both in the ward and in the lecture theater. His aim is a three-fold one; the treatment of disease, the education of the student, and the pursuance of research. Substantially the same arrangement exists in England where, however, the hospitals are privately managed and supported by voluntary subscriptions. But the managers of these hospitals recognize that the hospital is the better for the presence of the medical school—better not only for the medical staff but also vastly better for the patients. The medical schools in London, which constitute more than

half of all the medical schools in England and Wales, developed from hospitals and are still generally controlled by hospitals. Surely a very striking demonstration of the value to hospitals of medical schools!

The alliance of hospitals and medical schools has happily already begun in this country. Four medical schools already control their own hospitals. It seems safe to predict that within the course of a dozen years no medical school in the United States can claim to be in the first class if it does not control its own hospital. Within the same period it seems probable that every large city hospital must be conducted on a teaching or "medical institution" basis, if it is to have a scientifically trained staff and those laboratories which are more and more necessary for modern diagnosis and treatment.

In the city of New York, by far the largest city in the country, the hospitals and the medical colleges are still conducted as independent units. The great opportunities which the city offers both for medical education and research and the care and treatment of the sick can never be adequately utilized under these conditions. The beginning of reform lies in the combination of a first-class medical school and a first-class hospital. That alliance need not of course interfere with the legal independence of either institution or the authority which its board of trustees now exercises over it. All that is called for is the organization of a plan of co-operation for a common end—an end which cannot be attained by either institution working separately.

The President believes that the Cornell University Medical College should consider sympathetically any proposals leading to that consummation. It would need large gifts for a new site and buildings and for the improvement of existing departments, especially for full time clinical departments. But a large, disinterested, and statesmanlike measure of public policy of this sort should make a striking appeal to the generous public of the City of New York. And if the plan is taken up seriously there should be combined with it provision for a school of public health and hygiene, which is undoubtedly the great medical subject of the future. In the allied medical school and hospital the prevention of disease and its cure should be regarded as equally essential parts of medical education and medical practice.

THE FINANCIAL SHOWING FOR 1917–1918

The financial exhibit at the end of the year 1917–1918 is much better than had been anticipated at its beginning when a considerable deficit was anticipated. In the first place there was an increase in

several items of income over the estimate made at the beginning of the year. But the favorable financial showing is in the main due to a reduction in expenditures. During the summer of 1917 and the early autumn a considerable number of instructors and professors were called to the service of the Government with compensation not less than their university salaries. It was found possible to leave unfilled most of these positions as, owing to the diminished attendance of students, it was feasible to omit a good many of the courses of instruction which had been announced. Furthermore it was decided to postpone improvements of every kind which were not immediately and imperatively necessary.

As a result of these rigid economies the deficit anticipated at the beginning of the year was greatly reduced and in fact, owing to the generous contributions of the Alumni, it was actually converted into a credit balance of $16,089.19.

There had, however, accumulated in preceding years a deficit of current income amounting to $88,774. The above mentioned surplus for 1917–1918 reduces this deficit to $72,684.81. Of this amount approximately $35,000 is due to the book deficit caused in 1915–1916 by the change of the close of the university fiscal year from August 1 to July 1, and the rest to the practice of paying out of income for additional lands and new buildings.

ALUMNI GIFTS

The University received generous help from its Alumni during the year. The Cornellian Council reports that the net receipts of the Alumni Fund for the general support of the University were $69,847.59 for the fiscal year 1917–1918, as compared with about $54,000 for the preceding year. This gain was made despite the fact that many of the subscribers to the fund were in active military service. In addition to the receipts in cash, the Council obtained pledges of Liberty Bonds aggregating about $30,000. In connection with the second and third Liberty Loan "drives" the Council conducted campaigns throughout the country in an endeavor to obtain from Cornellians contributions in the form of Liberty Bonds to offset an expected deficit in the University's income. The fruit of these efforts was the pledge of about $60,000 of the bonds. About one-half of the sum pledged to the University in the form of bonds has already been received and is included in the net receipts of $69,847.59.

Of the receipts of the Alumni Fund during the year, $25,000 was, in accordance with a previous arrangement, appropriated toward the cost of construction of Founders Hall, and $15,550 was divided among 143 members of the instructing staff in the form of bonuses to augment their salaries, and the fund yielded to the university treasury (as stated above) enough more to convert an expected deficit into a credit balance for the year.

The use of a generous part of the Alumni Fund to supplement the salaries of a large number of instructors and assistant professors was first practised in 1917, when $18,500 was distributed among 189 members of those lower-salaried grades. Married assistant professors received $150; unmarried assistant professors, $100; married instructors, $100, and unmarried instructors, $50. The distribution this year was made in the same way. The number of beneficiaries was less because the instructing staff had become reduced in number. The bonus affects a temporary increase in salary of from four to ten per cent—a welcome addition to income in a period of abnormally high prices.

A notable gift from an individual alumnus was the Wason collection of books, manuscripts, maps, paintings, etc., relating to China. This collection was bequeathed to the University by Charles W. Wason of the class of 1876, who died at his home in Cleveland, Ohio, on April 15, 1918. Mr. Wason gave not only his valuable and perhaps unique library but also a fund of $50,000 for its permanent endowment at Cornell. The work of gathering this interesting collection had been Mr. Wason's chief occupation since his retirement from an active and successful business career almost twenty years ago. It comprises more than four thousand printed bound volumes; more than sixty thousand articles extracted from periodicals and assembled, bound, and indexed; fifty-five volumes of manuscripts; many maps, paintings, and engravings; and files of Chinese newspapers printed in the English language.

A collection somewhat similar in character to that of Mr. Wason was given to the University as a memorial of St. John Chilton, a former student of Sibley College. During a residence of several years in Japan, Mr. Chilton and his wife collected many genuine objects of Japanese art. After his death a group of Alumni, most of whom are residents of Philadelphia and Wilmington, bought the collection and gave it to the University.

Among other gifts mainly from the Alumni and old students during the year are the following: For the Fuertes Telescope $3,500 and for the American University Union and Cornell Bureau in Paris $6,483.20. From the estate of Eudorus C. Kenney of the Class of '82 there was received $38,522.52 for a Scholarship Fund as previously announced. Also from the estate of W. N. Wilson $3,851.25 for a Scholarship Fund. There was also received from A. R. Eastman for the endowment of the Eastman Stage prize a gift of $3,000.

PROFESSORIAL STATUS AND SALARIES

The war has tested once more the principle of professorial freedom of speech at Cornell University and the principle has again been vindicated. The experiment of giving the Cornell faculty a voice through representatives of their own, in the government of the University continues to give satisfaction. As regards the work of research the professors have in well-filled and well-equipped libraries and laboratories reasonable and in some cases ample facilities for carrying on their own independent work in scholarship and science. There remains, however, the drawback already noted in this Report that their teaching duties are so heavy that they too often lack both the time and the mental energy for the high intellectual effort which creative work involves. A reform at this point is an urgent need both at Cornell and other American universities.

The supreme condition, however, at the present time of any marked improvement in American colleges and universities is the raising of the salaries of the members of the instructing staff. The pecuniary attraction of the teaching profession must be very considerably increased. Of course there will always be men who enter the profession from the love of the work and the opportunity it offers of realising their highest ideals of life. Such men will become teachers whatever the pecuniary sacrifice involved. These, however, will always be a minority, and other motives as well must be appealed to in the case of the average individual if the normal supply of good teachers is to be maintained. The teacher must be paid, if not in proportion to the value of the high service he performs for society, at least on the basis of the compensation received by men of equal intelligence, education, and energy in other professions. And the sooner the profession of teaching is put on that sound economic basis the better it will be for the cause of education in America. Little improvement has been made in the salaries of the professors and

instructors in the colleges and universities of the country since the opening of the twentieth century. And the colleges and universities are bound to deteriorate if they are unable to pay the professor a salary which will afford a decent livelihood for his family, or which is near the equivalent of what he himself might earn in another profession. If the public wants good teachers it must adopt the obvious, but hitherto very generally disregarded, principle of paying them fair salaries. No doubt the colleges and universities get much unpaid service from affection, from loyalty, from disinterested sentiment. But the laborer is worthy of his hire and should receive it. Speaking for Cornell University the President has no hesitation in declaring that no reform is so much needed or would be productive of such important and valuable results. Philanthropists who would inaugurate a statesman-like policy in higher education should give their money for the liberal endowment of professorships.

THE SEMI-CENTENNIAL CELEBRATION

Now that Germany has sought peace and on November 11 signed an armistice it has been decided to hold in June 1919 the Semi-Centennial Celebration of the opening of the University, which prior, to America's entrance into the war, it had been planned to hold in October 1918 (the University having opened in October 1868). The month of June is a better time for the commemoration than October, and as it will be combined with Commencement there will be a double appeal to the alumni, old students, and friends of the University to be present. It is hoped too that by that time a goodly number of the thousands of Cornell men who, as explained elsewhere in this Report, are now engaged in the military and naval service of the country, will have returned from Europe. The law under which Cornell University was founded was enacted by Congress and approved by Lincoln in the darkest days of the Civil War. The life and service of the University cover the period beginning with the triumphant ending of the war for Liberty and Union in the United States and extending to the triumphant ending of the war for Liberty and Democracy in the world. In the first of these wars only Americans were engaged; in the last though all the great nations of the world were belligerents yet America, slow as she was in entering on hostilities, nevertheless proved in the end the decisive factor. Patriotism will therefore be among the high notes of the Celebration, love of country and pride in its ideals and history blending with

loyalty to Alma Mater, and with rejoicings in its achievements, devotion to its spirit and work, and enthusiastic preparation for another half century of service. In that future the University must aim at still higher and quicker intellectual life, still better and more inspiring teaching and still more intense and consecrated devotion to the cultivation of scholarship, the enlargement of science and knowledge and the advancement of human civilization. The new age will bring to the University many new opportunities and duties. On its record of service for a half century it confidently appeals to a generous public to provide it with the means for realizing and fulfilling them.

Special attention is called to the accompanying reports of the Comptroller, the Deans, and other officers which form an integral part of this Report.

JACOB GOULD SCHURMAN,
President.

In Memoriam

FRANKLIN MATTHEWS, A.B.

Born May 14, 1858 Died November 26, 1917

A.B. '83; Alumni Trustee 1913–1918; President of the Cornellian Council 1915–1918; Professor of Journalism in Columbia University. An Alumnus devoted to his Alma Mater.

CHARLES MELLEN TYLER, D.D.

Born January 8, 1832 Died May 15, 1918

For many years a Distinguished Clergyman; Professor of the History and Philosophy of Religion and of Christian Ethics in Cornell University 1891–1906; and an *ex-officio* Trustee 1907–1918. A man of faith, hope, and charity.

WILLIAM MECKLENBURG POLK, M.D., LL.D.

Born August 15, 1844 Died June 23, 1918

A man of rare personal charm; Member of a family distinguished in American History; a leader in the Medical Profession; First Dean of the Cornell University Medical College in New York City.

HENRY SHALER WILLIAMS, Ph.D.

Born March 6, 1847 Died July 31, 1918

Professor of Geology in Cornell University 1880–1892 and 1904–1912 and in Yale University 1892–1904. A lover of Truth; a kindly Teacher; Diligent in Research; Earnest in Life.

KENNETH BERTRAND TURNER, M.C.E.

Born July 19, 1882 Died October 21, 1918

Instructor and Assistant Professor of Hydraulics in Cornell University 1906–1918. An inspiring and thorough Teacher; an energetic and tireless Worker.

GEORGE FRANCIS ATKINSON, Ph.B.

Born January 26, 1854 Died November 14, 1918

Assistant Professor, Associate Professor, and Professor of Botany in Cornell University 1892–1918. A Scientific Investigator of high standing; a Teacher who inspired able students with a love of research.

RICHARD WEIL, A.M., M.D.

Died November 19, 1917

Assistant, Instructor, and Professor of Experimental Pathology and Medicine 1904–1818. Major M. R. C. Camp Wheeler, Macon, Georgia. A successful Clinician, Teacher, and Investigator.

JAMES CHEW JOHNSTON, A.B., M.D.

Died May 10, 1918

Assistant, Instructor, and Assistant Professor of Dermatology 1898–1918. Served with the Red Cross in France. A fruitful Investigator, beloved by his students and colleagues.

REPORT OF THE COMPTROLLER OF CORNELL UNIVERSITY 1917–1918

To the Board of Trustees:

I have the honor to submit herewith a financial statement of Cornell University covering the fiscal year from July 1, 1917, to July 1, 1918.

INCOME AND EXPENSE

The total income for the year 1917–1918 applicable to current expenses, exclusive of state colleges, was $2,076,562.55. The total expenses $2,006,824.87. The excess of income over the amount expended $69,737.68. From this latter sum should be deducted the amount transferred to the fund representing income due special funds $16,497.54 and the amount of increase in reappropriations to meet obligations already incurred, including that portion of the Morse Hall Insurance Fund not expended under the authority of the Board for repairing the building for temporary use and replacing apparatus, $37,150.95. This represents an actual surplus for the year of $16,089.19.

At the beginning of the year, after cutting appropriations for salaries and departmental expenses to the fullest extent that seemed possible at that time, it was estimated that we would have a deficit for the year of from $150,000.00 to $160,000.00, but during the summer vacation and in the early fall a large number of professors and assistant professors were called to the service of the Government for positions that paid salaries at least equal to their University salaries, thus releasing the University from the entire burden of these salaries, and by omitting all improvements not immediately necessary, coupled with an increase in several items of income, this contemplated deficit was largely reduced, and the generous contributions of the alumni cancelled it altogether, so that the year closed, as above stated, with a credit balance of $16,089.19 which reduced our accumulated deficit of current income from $88,774.00, as reported a year ago, to $72,684.81.

STATE COLLEGES

The income of the New York State Veterinary College amounted to $104,921.02 and the expense to $107,021.21. The State College of Agriculture received during the year from appropriations from the state and from student fees and sales of products $980,796.99. The expenses of the College aggregated $1,027,574.55.

THE UNITED STATES ARMY SCHOOL OF MILITARY AERONAUTICS

This school established by the Government during the latter part of May, 1917, continued throughout the year 1917–1918. The expense of the school was $178,294.78 and the income $178,797.49, leaving a credit balance on July 1 of $502.71.

CONDENSED AND COMBINED INCOME STATEMENT
(See Schedule II of Treasurer's Report)

	University at Ithaca	University at New York	State Veterinary College	State Agricultural College	Total
Tuition	$292,382.85	$20,045.00	$1,292.50	$28,315.00	$342,035.35
Summer Session	29,210.00			2,213.37	31,423.37
Laboratory and other fees	118,079.16	6,459.48	2,353.09	18,664.15	145,555.88
	$439,672.01	$26,504.48	$3,645.59	$49,192.52	$519,014.60
From invested funds	470,203.49	208,148.37			678,351.86
College Land Scrip Fund	34,428.80				34,428.80
Residential Halls	91,072.79				91,072.79
Dining rooms	319,184.44				319,184.44
From United States	154,588.92				154,588.92
From State of New York	19,158.65		86,899.98	677,748.34	783,806.97
State of New York for Drill Hall					42,137.45
School of Military Aeronautics	178,797.49				178,797.49
Rents for buildings	3,142.00				3,142.00
Donations for current expenses	37,098.90	3,560.00			40,658.90
Donations for increase of plant	25,000.00				25,000.00
Departments for sales and service	21,891.71	16,825.74	14,097.34	253,856.13	306,670.92
Miscellaneous	25,399.00	1,885.76	278.11		27,562.87
	$1,819,638.20	$256,924.35	$104,921.02	$980,796.99	$3,204,418.01

CONDENSED AND COMBINED EXPENSE STATEMENT
(See Schedule III of Treasurer's Report)

Salaries for instruction and research	$466,402.94	$112,150.20	$40,063.61	$419,662.01	$1,038,278.76
Departments	132,891.12	33,088.54	14,804.37	388,929.93	569,713.96
Administration salaries	57,016.64	8,295.00	7,640.00	62,638.24	135,589.88
General expenses	75,563.23	8,564.11	2,529.47	25,137.92	111,794.73
Operation and Maintenance of plant	78,534.54	61,924.57	12,857.15	56,869.73	210,185.99
Prizes, Scholarships, Fellowships and loans	28,221.09	1,950.00			30,171.09
Residential Halls	60,901.20				60,901.20
Dining Rooms	319,184.44				319,184.44
Summer Session	33,715.18			10,303.73	44,018.91
Federal Experiment Station and extension work	102,910.42				102,910.42
Library	39,489.12				39,489.12
Infirmary and Medical Advisers	36,903.96				36,903.96
New Construction and alterations	43,132.94			29,625.59	72,758.53

New York State Drill Hall Building					$ 42,137.45
Special Equipment			$ 3,974.90		3,974.90
Repairs	$ 22,541.00			$ 13,977.74	36,518.74
Industrial Fellowships	2,229.22				2,229.22
Special investigation and experiment			24,042.13	6,526.92	30,569.05
Miscellaneous	43,523.56		1,109.58	9.34	44,642.48
Reduction advance by University		28,150.00			28,150.00
Game farm purchase and equipment				13,893.40	13,893.40
U. S. Army School of Military Aeronautics	178,294.78				178,294.78
Income transferred to principal	19,947.07	5,000.00			24,947.07
Income transferred to Medical College	6,300.00				6,300.00
	$1,747,702.45	$259,122.42	$107,021.21	$1,027,574.55	$3,183,558.08

PROPERTY ACCOUNT

	July 1, 1917	July 1, 1918	Increase	Decrease
Productive Funds.				
University at Ithaca	$9,650,725.10	$9,723,819.41	$73,094.31	
Medical College at New York	4,493,176.79	4,498,176.79	5,000.00	
Residential Halls	1,055,065.73	1,080,065.73	25,000.00	
	$15,198,967.62	$15,302,061.93	$103,094.31	
Income due Special Funds	134,900.56	151,398.10	16,497.54	
Premium and Discount (including Medical $5,000.00)	82,852.83	104,422.86	21,570.03	
	$15,416,721.01	$15,557,882.89	$141,161.88	
Add cash balance of current Income less amount due Special Funds account, but not including amount due to complete contracts	125,471.81	178,711.95	53,240.14	
	$15,542,192.82	$15,736,594.84	$194,402.02	
Real Estate, educational ,etc	4,012,526.13	4,021,265.17	8,739.04	
Equipment	2,207,200.67	2,242,238.03	35,037.36	
Total University property exclusive of 280 acres of Western land	21,761,919.62	22,000,098.04	$238,178.42	
State Game Farm		11,150.00	11,150.00	
State Drill Hall	299,533.25	341,670.70	42,137.45	
State College Buildings	1,524,226.72	1,545,203.55	20,976.83	
State College Equipment	436,302.89	432,688.25		$3,614.64
	$24,021,982.48	$24,330,810.54	$312,442.70	
			3,614.64	
			$308,828.06	

The Productive Funds increased during the year as follows:

Alumni Fund Permanent		$1,000.00
Class 1889 Endowment Fund		590.00
Class 1917 Fund		1,122.88
Eastman Stage Fund		3,000.00
Simon H. Gage Fellowship		15.00
Guiteau Loans repaid and interest		7,723.89
Guiteau Fund donation		2.29
Guiteau Fund Tax refunded		2.44
Eudorus C. Kenney Scholarship Fund		38,522.52
W. N. Wilson Scholarship Fund		3,851.35
By transfer from Income to Principal of Funds		19,947.07
		$75,777.44
Reduced by:		
Cottage Renewal Fund—J. W. Williams Cottage fire loss	$2,683.13	$ 2,683.13
Net increase		$73,094.31
Productive Building accounts increased:		
Founders Hall	25,000.00	$25,000.00
		$98,094.31
Medical Increment Fund Increase	5,000.00	$ 5,000.00
		$103,094.31

Premium and Discount increased by $21,570.03 excess of discounts over premiums paid on securities purchased during the year.

To the Real Estate Account there was added:

Agricultural farms paid on account	$1,670.20	
Astronomical observatory	5,068.84	
Heights Lots	2,000.00	
		$8,739.04

The average rate of interest received during the year 1917–18 was 5.15 per cent.

The Productive Funds of the University with the purpose for which the Fund is intended and the income received during the year are as follows:

	July 1, 1917	Additions During Year	July 1, 1918	Income Received During Year
Alumni Endowment Fund: Gift of Alumni to the Endowment Fund of the University. Established 1908	$ 550.00		$ 550.00	$ 28.33
Alumni Fund: The permanent Gift of the Alumni of the University through the Cornellian Council, and by the action of the Board of Trustees added to the permanent endowment of the University, the net income to be used for University purposes. Established 1913	21,422.00	$1,000.00	22,422.00	1,103.23
Baker, Chas. H., Prize Fund: Gift of Charles H. Baker, 1886, to found a public speaking prize for the benefit of the Junior and Senior students in the College of C.E., but available likewise to those in Mechanic Arts, Architecture and similar avocational courses. Established 1912	3,000.00		3,000.00	90.00
Barnes Library Endowment Fund: Gift of Mrs. Harriet Barnes Newberry and A. Victor Barnes in memory of their father, the late Alfred Cutler Barnes. Established 1904	5,000.00		5,000.00	257.50
Barnes, Mrs. A. S., Shakespeare Prize Fund: Gift of Mrs. A. S. Barnes the income to be appropriated as a prize to the undergraduate student who shall present the best essay upon the writings of Shakespeare. Established 1887	1,000.00		1,000.00	51.50
Bennett, James Gordon, Prize Fund: Gift to endow the prize established in 1912 by Mr. Bennett for work done in local and generalized anæsthesia, especially in small animals. Established 1916	1,050.00		1,050.00	54.08
Bennett, Philo S., Fund: Gift from the estate of Mr. Bennett, the income to be used for a prize for the best essay discussing the principles of Free Government. Established 1905	400.00		400.00	20.60
Botsford, W. Hull, Memorial Fund: Gift of friends in class of W. H. Botsford to the College of Architecture, to be administered by the Faculty of that College. The income to be used for the purchase of books for the Architectural Library. Established 1915	255.00		255.00	13.13

	July 1, 1917	Additions During Year	July 1, 1918	Income Received During Year
Caldwell, George Chapman, Prize Fund: Gift of Mrs. Grace Caldwell Chamberlain and Prof. Frank Caldwell to establish in memory of their father a prize of $50 a year, to be annually awarded in money and accompanied by a certificate on parchment, to a member of the Senior class in the Chemical course for general excellence in chemical work. The award to be made by the staff of the Chemical Department. Established 1913	$ 1,100.00		$ 1,100.00	$ 56.65
Class '86 Memorial Prize Fund: Gift of Class of 1886, the income to be awarded annually as a prize in Junior Oratory	1,886.00		1,886.00	97.13
Class '89 Endowment Fund: A university endowment fund being raised by the class of 1889. Established at its 25th reunion in 1914	2,600.00	$ 590.00	3,190.00	133.90
Class '91 Memorial Fund: Gift of Class of 1891, the income to be added to the principal until class action. Established 1891	859.72	44.28	904.00	44.28
Class '94 Memorial Debate Prize Fund: Gift of Class of 1894, as a foundation of a prize in debate	1,894.00		1,894.00	97.54
Class '96 Memorial Fund: Gift of Class of 1896 as a nucleus for a fund which shall be used for the establishment of a University Club	1,293.25	66.60	1,359.85	66.60
Class '98 Alumni Hall Fund: Gift of Class of 1898 to be added to fund for establishment of a University Club	560.60	28.87	589.47	28.87
Class 1905 Endowment Fund: Established by the Class of 1905 "this money in total or in interest, as the council may see fit, to be applied to supplementing professors' salaries, at the discretion of the proper University authorities." Established 1915	7,703.00		7,703.00	396.70
Class 1908 Fund: Established by Class of 1908, to be invested with University funds, the income on $500 less 5% transferred to University Insurance Reserve Fund to be paid over to Class Secretary. When no longer needed by the Class the fund is to revert to the University for general University purposes unless the class at some regular meeting designates a particular University purpose for its use. Established 1908	1,980.39	76.99	2,057.38	101.99

Class 1912 Fund:				
Established by Class of 1912 to be invested by the University with its funds, the income less 5% transferred to University Insurance Reserve Fund to be subject to call of Life Secretary of Class. The Fund when no longer needed by the class to revert to the University for general University purposes unless the Class at some five-year reunion meeting designates a particular University purpose for its use. Established 1912	813.38		813.38	41.89
Class 1913 Fund:				
Established by Class of 1913 on same basis as the 1912 fund	1,450.00		1,450.00	74.68
Class of 1914 Fund:				
Established by Class of 1914 on same basis as the 1912 fund	800.00		800.00	41.20
Class 1915 Fund:				
Established by Class of 1915 on same basis as the 1912 fund	1,618.91		1,618.91	83.37
Class of 1916 Fund:				
Established by Class of 1916 on same basis as the 1912 fund	2,850.00		2,850.00	146.78
Class of 1917 Fund:				
Established by Class of 1917 on same basis as the 1912 fund		$ 1,122.88	1,122.88	28.91
College Land Scrip Fund:				
Consists of proceeds received by State of New York from sale of Land Scrip apportioned to the State by the United States under the Morrill Act of 1862	688,576.12		688,576.12	34,428.80
Comstock, John H., Memorial Fund:				
Raised by students and alumni as a memorial to Prof. Comstock at the time of his retiring from active service and presented by Prof. Comstock to the University as a Fund for the purchase of books for the benefit of the Department of Entomology. Established 1914	2,516.42		2,516.42	129.60
Cornell Endowment Fund:				
Consists of the $500,000 given by Ezra Cornell, pursuant to his agreement with the State, for the founding of the University, together with the net profits derived from the sale of lands located under the scrip purchased by him under his contract with the State, of August 4, 1866, except those in the Cascadilla Hall Fund	5,381,026.14		5,381,026.14	277,752.95
Corson, Caroline, French Prize Fund:				
Gift of Prof. Hiram Corson in memory of his wife, Caroline Rollin Corson, income to be awarded as a French prize. Established in 1902 as a Dante Prize and converted into a French Prize in 1905	1,281.25		1,281.25	65.98

	July 1, 1917	Additions During Year	July 1, 1918	Income Received During Year
Corson, Hiram, Browning Prize Fund: Gift of Prof. Hiram Corson, income to be awarded as a Browning Prize. Established 1902	$ 1,051.80		$ 1,051.80	$ 54.17
Cottage Renewal Fund: Consists of surplus income from Cottages owned by University, in excess of 5% of investment value transferred annually to current income, fund to be held to renew the cottages or replace investment therein. Established 1904	22,585.97	$*1,519.95	21,066.02	1,163.18
Crandall, Charles Lee, Prize Fund: Gift of the Alumni of the College of Civil Engineering "to provide prizes intended to encourage original research, to stimulate interest in matters of public concern, and to inspire in the students an appreciation of the opportunities which the profession of Civil Engineering offers them to serve their fellow men as intelligent and public spirited citizens." Established 1916	2,602.36		2,602.36	134.02
Daughters of the Revolution Endowment Fund: Gift of Miss Mary F. Hall, in honor of the New York State Society of the D. A. R., income to be added to fund during Miss Hall's lifetime and then, provided principal amounts to $1,000 to be used for publication of such original studies in American History as are of permanent value, or as a suitable prize or prizes for research or superior attainment in American History. Established 1908	776.57	39.99	816.56	39.99
Dearstyne, Florence, Fund: Gift under the will of Miss Florence E. Dearstyne, income to be used under direction of Federation of Cornell Women's Clubs in assisting needy young women students. Established 1914	2,367.71		2,367.71	121.94
Eastman Stage Fund: Gift by A. R. Eastman of Waterville, N. Y., in 1918, to endow the annual stage maintained by him by annual gift since 1909. The administration of the fund to be in the hands of the Director of the College of Agriculture for the purpose of maintaining a stage or speaking contest each year on questions of public interest to agriculture and country life.		3,000.00	3,000.00	
Fayerweather Fund: Gift under will of Daniel B. Fayerweather. Established 1892	331,528.56		331,528.56	17,073.72
Fiske, Willard, Library Endowment Fund: Gift under will of Willard Fiske to be used and expended for uses and purposes of Library of the University. Established 1906	450,055.00		450,055.00	23,177.83

Fiske, Willard, Icelandic Book Fund: Gift under will of Willard Fiske, income to be used for purpose of making additions to Icelandic Collection in the Library of the University. Established 1906	8,000.00	8,000.00	412.00
Fiske, Willard, Icelandic Salary Fund: Gift under will of Willard Fiske, income to be used for purpose of paying salary of an Icelandic amanuensis, whose time shall be given to care of Icelandic collection and who shall be a native of Iceland, educated or principally educated in Iceland, and recommended for said work by the Rector of the Latin School of Reykjavik. Established 1906	30,000.00	30,000.00	1,545.00
Fiske, Willard, Petrarch Salary Fund: Gift under will of Willard Fiske, income to be used in paying salary or part salary of capable amanuensis, a portion of whose time shall be given to care of Petrarch and Dante Collections. Established 1906	12,000.00	12,000.00	618.00
Fiske, Willard, Petrarch Book Fund: Gift under will of Willard Fiske, income to be used for purposes of increasing Petrarch and Dante collections in Library of the University. Established 1906	6,000.00	6,000.00	309.00
Fiske, Willard, Icelandic Publication Fund: Gift under will of Willard Fiske, income to be used for purpose of publishing an annual volume relating to Iceland and the Icelandic collection in the Library of the University. Established 1906	5,000.00	5,000.00	257.50
Flower, R. P., Library Endowment Fund: Established in 1901 by a gift of Mrs. Sarah M. Flower of $10,000.00, the income to be used for the purchase and binding of books and periodicals for the Roswell P. Flower Library, founded by Governor Flower for the Veterinary College, by a gift of $5,000 in 1897, $1,000 remaining unexpended at the time of his death is added to the endowment	11,000.00	11,000.00	566.50
Fraser Scholarship Fund: Gift of Wm. Metcalf, Jr., LL.B., 1901, of Pittsburg, Pa., in memory of Alexander Hugh Ross Fraser for eighteen years librarian of the Law Library, income to be awarded in two scholarships of $100.00 and $50.00 respectively to seniors in Law the award to be based on scholarship, financial need, and character. Annual surplus to be paid to Cornellian Council. Established 1911	4,000.00	4,000.00	206.00

	Juy 1, 1917	Additions During Year	July 1, 1918	Income Received During Year
Fuertes Medal Fund: Gift of late Estevan A. Fuertes, income to provide two medals to be awarded annually, one to the student graduating, who has maintained the highest degree of scholarship during his four years, the other to the graduate, who may write a meritorious paper on some engineering subject. Established 1893	$ 1,000.00		$ 1,000.00	$ 51.50
Gage, Simon H., Fellowship Fund: Raised by former students and friends of Prof. Gage to establish a fellowship in Animal Biology. The income is to be added to the principal until such time as the fund shall be sufficient to yield an annual income of $500. Established 1916	2,933.06	$ 166.05	3,099.11	151.05
General Fund: Consists of the endowment of not less than $100,000 available for the maintenance of Rockefeller Hall, required as a condition precedent to John D. Rockefeller's gift	106,000.00		106,000.00	5,459.00
Graduate Prize in Philosophy: The income to be placed at the disposition of the Philosophical Department, and for the present to be awarded to that graduate student who submits the best paper embodying the results of research in the field of Philosophy. Established 1912	571.36		571.36	29.43
Guiteau Student Loan Fund: Gifts under the wills of Frederick W. Guiteau ($178,767.34) and Mrs. Nancy G. Howe ($94,689.03), income to be used in advancing and assisting needful, worthy young men in pursuing their studies in the University. Established 1904	322,421.48	7,728.62	330,150.10	16,604.71
Guilford Essay Prize Fund: Gift under will of James B. Guilford to establish a prize the object whereof shall be the promotion of a high standard of excellence in English Prose Composition. Established 1902	3,000.00		3,000.00	154.50
Hall, Mary F., Scholarship Fund: Gift of Miss Mary F. Hall, income to be paid to her during her lifetime, and at her death to be used for scholarships. Established 1902	16,500.00		16,500.00	849.75
Harris, Lucy, Fund: Gift of Geo. W. Harris as a memorial to his wife, Lucy Thurber Harris, income to be expended each year in purchase of English poetry of the Victorian Era and of Biography and criticism connected therewith. Established 1893	1,000.00		1,000.00	51.50

Haviland Scholarship Fund:				
Gift of $500 under the will of John G. Haviland of Glens Falls, N. Y., to be invested until such time as a bequest under the will of his daughter, Bernice Haviland Guernsey, shall be paid to the University when the income of both is to be applied to scholarships for girls residing in Warren County, N. Y. Established 1916	543.07	27.97	571.04	27.97
Infirmary Endowment Fund:				
Gift of Dean and William H. Sage, income to be used for the maintenance and needs of the Cornell Infirmary, established by them as a memorial to their father, Henry W. Sage, said infirmary being the former residence of Henry W. Sage, and valued at $60,000. Established 1897	100,000.00		100,000.00	5,150.00
Irvine, Frank, Lectures:				
Founded by the Conkling Chapter of Phi Delta Phi, income to be used in providing special lectures in College of Law. Established 1913	1,743.25		1,743.25	89.78
Kenney Endowment Fund:				
Gift of Eudorus C. Kenney of the Class of 1882 the net income to be used for one or more scholarships with preference to students from the town of Truxton, Cortland County, N. Y. Established 1918		38,522.52	38,522.52	803.06
Law School Fund:				
Gift of Douglass Boardman, income to be used for a Law Prize. Established 1887	2,000.00		2,000.00	103.00
Messenger, Luana L., Prize Fund:				
Gift of H. J. Messenger in memory of his mother, for an annual prize to the student writing the essay giving evidence of the best research and most fruitful thought in the field of human progress or the evolution of civilization. Established 1902	5,000.00		5,000.00	257.50
Meyer, Edgar J., Memorial Fellowship Fund:				
Gift of Mr. Eugene Meyer and his wife, Harriet Meyer, in memory of their son, income to be awarded annually as a fellowship in Engineering Research, to any graduate of an accepted school of Mechanical or Electrical Engineering and not to be held by the same person more than two years. Established 1913	10,000.00		10,000.00	515.00
Pack, C. Lathrop, Fund:				
Gift of Chas. Lathrop Pack to be used "in the interests of forestry." The interest is now used by the Faculty of the Department of Forestry as an annual prize. Established 1915	500.00		500.00	25.75

	July 1, 1917	Additions During Year	July 1, 1918	Income Received During Year
Padgham, Frank William, Scholarship Fund: Gift of Amos Padgham to found a scholarship in Sibley College in memory of his son. Established 1892	$ 3,000.00		$ 3,000.00	$ 154.50
Polish Student Loan Fund: Gift from Polish students at Cornell to be disbursed to candidates presented by members of the Polish Club of the University. Established 1909	128.00		128.00	6.59
Professorial Pension Fund Income: Consists of payments by professors admitted to the benefits of the Pension Fund, with accrued income	42,594.99	$ 1,453.86	44,048.85	2,193.64
Ring Memorial Fund: Gift under will of Charles A. Ring, income to be used in advancement of Horticultural Science. Income is to be added to the principal of fund till it amounts to $1,000, original bequest. Established 1913	913.64	47.05	960.69	47.05
Roberts, Charles H., Scholarship Fund: Gift of Charles H. Roberts of Oakes, Ulster Co., New York, income to be used in payment of five equal annual scholarships in College of Agriculture and open to all races of mankind, regardless of color, or political or religious creeds, of good moral character and required qualifications, preference to be given to intelligence and financial inability. Established 1906	30,000.00		30,000.00	1,200.00
Sage College Endowment Fund: Gift of Henry W. Sage. Established 1872	109,300.00		109,300.00	5,628.95
Sage, Dean, Sermon Fund: Gift of Dean Sage in 1872 as an endowment of Sage Chapel and increased by recent gifts from Mrs. Sage	75,000.00		75,000.00	3,862.50
Sage Library Endowment Fund: Gift of Henry W. Sage for endowment of Library. Established 1891	300,000.00		300,000.00	15,450.00
Sage, Sarah M., Endowment Fund: The income or in the discretion of the University, the principal also, to be used to promote the advancement of medical science by the prosecution of research at Ithaca, in connection with any and all the subjects at any time embraced in the curriculum of the Cornell University Medical School. Established 1915	50,000.00		50,000.00	2,575.00
Sage, Susan E. Linn, Professorial Fund: Gift of Henry W. Sage, to endow the chair of Ethics and Philosophy. Established 1885	50,000.00		50,000.00	2,575.00

Sage, Susan E. Linn, School of Philosophy Fund:				
Gift of Henry W. Sage to enlarge basis of Susan Linn Sage Foundation and establish the Susan Linn Sage School of Philosophy. Established 1891	200,000.00		200,000.00	10,300.00
Sage, William H., Pension Fund:				
Gift of $150,000 to found a pension fund for full professors, excluding professors in the Medical College in New York City, or in State or National Institutions at Ithaca, or elsewhere, together with income received thereon. Established 1903	302,323.49	14,003.32	316,326.81	15,569.66
Sampson, Frances, Fine Arts Prize Fund:				
Gift of Prof. Martin W. Sampson in memory of his wife, to be awarded in books or artistic reproductions and not in money to that student in the University who shows the most intelligent appreciation of the graphic arts and architecture. Established 1909	600.00		600.00	30.90
Schiff, Jacob H., Endowment Fund:				
Foundation for Human Civilization. Established 1912	100,000.00		100,000.00	5,150.00
Sidell, William C., Book Fund:				
Gift of Mr. and Mrs. Gerritt S. Miller, income to be used to purchase books for poor young men working their way through College of Civil Engineering. Established 1905	1,165.16		1,165.16	60.00
Sibley College Endowment Fund:				
Gift of Hiram Sibley. Established 1884	50,000.00		50,000.00	2,575.00
Smith, Goldwin, Fund:				
Gift under will of Goldwin Smith to be used for promotion especially of liberal studies, language ancient and modern, literature, philosophy, history and political science, for which provision was made in Goldwin Smith Hall. Established 1911. One hundred seventy-five thousand dollars of this fund is set aside, the income to be used for the Goldwin Smith Special or Supernormal Salary Fund, Lectureship Fund, Faculty Prize Fund, Reading Room or other appropriate purposes	679,016.29		679,016.29	34,969.34
Smith, Goldwin, Hall Reading Room Fund:				
A portion of the $4,000 gift of Mr. Goldwin Smith made in 1909 for the Reading Room in Goldwin Smith Hall. Converted in 1914 into a fund, income to be available for the maintenance of same	2,700.00		2,700.00	139.05

	July 1, 1917	Additions During Year	July 1, 1918	Income Received During Year
Smith, Horace I., Fund: Gift under the will of Mr. Smith, the income to be added to the principal until the fund shall reach the sum of $20,000, then the income to be expended in assisting deserving needy students under specified restrictions. Established 1916	$ 2,697.26	$ 138.91	$ 2,836.17	$ 138.91
Smith, Judson N., Scholarship Fund: Gift of Mrs. Sarah L. Smith to found a scholarship in the College of Civil Engineering in memory of her son, and to be awarded, under such rules as the University may enact, on the basis of intelligence and financial inability, provided, however, that the student be of good moral character and meet the required qualifications. Interest at the rate of four per cent upon the fund to be paid to Mrs. Smith during her lifetime, the Scholarship taking effect at her death	3,250.00		3,250.00	167.38
State Scholarship Alumni Fund: Being the nucleus of a fund to assist needy students. Established in 1914 by a gift of G. W. Graves, A.B., 1905, M.D., 1908, of the equivalent of the state scholarship held by him	401.00		401.00	20.66
Town of Spenser Scholarship for Young Women Fund: Gift of Miss Mary F. Hall to found a scholarship for young women, of the Town of Spencer, N. Y., the income, however, to be paid to her during her lifetime	2,500.00		2,500.00	128.75
Vail Endowment Fund: Gift under the will of Edwin G. Vail of Dutchess County, the income to be expended in the aid of needy students from Dutchess County, who may in the annual examinations therefor succeed in winning a State Scholarship in Cornell University. Established 1916	10,000.00		10,000.00	515.00
White Veterinary Prize Fund: Gift of Horace K. White, income to be awarded as prizes to meritorious students in Veterinary Science	500.00		500.00	25.75
White Spanish Prize Fund: Gift of J. G. White, Class of 1885, to found three annual prizes of $100 each, in Spanish, any excess of income or profit from the sale of the securities to be added to the principal. Two of the prizes to be given for excellence in Spanish to students who are citizens or residents of the United States, one to a student in the engineering colleges and the other in any of the other colleges, the third prize to be given, for excellence in English, to students who are citizens or residents of the Latin-American Republics, and for the next ten years, of Porto Rico or the Philippines. Established 1914	6,596.00	189.80	6,785.80	389.80

Wilson Endowment Fund: Gift under the will of Mrs. Mary Northrup Wilson to carry out the wish of her son, Fred Lewis Wilson, to found a scholarship of not more than two years each for undergraduates in Sibley College		3,851.35	3,851.35	176.51
Women's Guild Fund: Gift of women interested in the University income to be used to aid needy sick students. Established 1892	6,557.41		6,557 41	337.71
Women Students Loan Fund: Consists of former Students Loan Fund, income to be loaned to needy women students, and increased in 1913 by $7,000, temporarily assigned to the fund by Ex-President Andrew D. White from funds placed at his disposal by Trustee Andrew Carnegie	23,047.75	2,515.20	25,562.95	1,186.96
Woodford Medal Fund: Gift of Stewart L. Woodford, for prizes in Oratory. Established 1870	2,500.00		2,500.00	128.75
Wurts Loan Fund: Gift of $2,000 by Alexander Jay Wurts, in memory of his mother, income to be loaned to students of Sibley College to "help lift the man's burden from the boy's shoulders." Additions by Sibley students. Established 1912	2,267.74		2,267.74	116.79
	$9,650,725.10	$73,094.31	$9,723,819.41	$497,258.69
Medical College Endowment Fund: The gift of Col. O. H. Payne, the income to be applied to the maintenance and operation of the Cornell University Medical College in the City of New York. Established 1913	$4,350,000.00		$4,350,000.00	$201,848.37
Medical Increment Fund: Established on recommendation of Medical College Council, the "sum of $5,000 to be set aside annually to constitute an 'increment fund' the income of which may be expended, and the principal of which or any portion thereof may from time to time be expended in case of need for permanent betterments or additions to the plant of the Medical School in New York City." Established 1914	15,000.00	5,000.00	20,000.00	772.50
Loomis Laboratory Endowment Fund: Consists of endowment of Loomis Laboratory turned over to the University by its Trustees at the time laboratory was transferred to Cornell. Established 1899	118,176.79		118,176.79	6,086.10
Polk, J. M., Prize Fund:				

	July 1, 1917	Additions During Year	July 1, 1918	Income Received During Year
Gift of Wm. M. Polk to found a prize in the Cornell Medical College at New York in memory of his son. Established 1905	$ 10,000.00		$ 10,000.00	$ 515.00
	$14,143,901.89	$78,094.31	$14,221,996.20	$706,480.66
Residential Halls Funds Reserve:				
Baker Court Fund:				
The gift of George F. Baker for the construction of the Residential Halls for men known as Baker Court	$358,249.24		$358,249.24	$7,704.82
Cascadilla Hall Fund:				
A portion of the Cornell Endowment Fund invested in Cascadilla Hall	120,000.00		120,000.00	4,874.79
Founders Hall Fund:				
The gift of the Alumni of the University through the Cornellian Council to cover, with the net income of the building, the cost of the residential hall for men known as Founders Hall	60,000.00	$25,000.00	85,000.00	1,836.36
Prudence Risley Hall Fund:				
The gift of Mrs. Russell Sage for the construction of the residential hall for women named Prudence Risley in memory of the mother of Mr. Sage.	293,154.34		293,154.34	4,599.25
Sage College Building Fund:				
A portion of the Sage College Endowment Fund, and income from the building, used for the construction of the residential hall for women named Sage College	210,662.15		210,662.15	10,728.02
Three Central Avenue Fund:				
A portion of the income of the University invested in the building at 3 Central Ave.. and now used as residential hall for unmarried members of the staff and for the University Club	13,000.00		13,000.00	428.35
	$15,198,967.62	$103,094.31	$15,302,061.93	$736,652.25
Income due special funds			151,424.76	
Premium and discount			104,422.86	
Cash balance current income less amount due special funds			178,685.29	
			$15,736,594.84	

*Decrease.

CORNELLIAN COUNCIL

There was received during the year from the Alumni through the Cornellian Council the sum of $55,000.00, of which $25,000.00 was applied on cost of Founders Hall, the cost of which is being met by contributions of the Alumni, $15,550.00 was applied to emergency salary contributions to members of the instructing staff, and the balance to certain designated capital accounts and towards the running expenses of the University.

The contributions of the Alumni toward the cost of Founders Hall amount in the aggregate to $85,000.00, leaving a balance unpaid of $16,723.53.

DONATIONS 1917–1918

The following is a list of gifts to the University that passed through this office. It does not include many gifts made directly to departments.

American Association of International Conciliation for Lecturer on South America, 1917 Summer Session	$	300.00
Campbell, J. W., for Guiteau Student Loan Fund		2.29
Church, I. P., Committee for Fuertes Telescope Acct		3,500.00
Class 1917 Fund		1,122.88
Class 1921 for flag		50.00
Cornell War Committee for American University Union in Europe		2,634.20
Contributions, for Cornell Paris Bureau		3,849.00
Cornellian Council for Women's Dormitory account		2,345.65
" " " Class 1889 Endowment Fund		590.00
" " " Inc. for 5 yrs. for Botanical Research		1,000.00
" " " Founders Hall		25,000.00
" " " Gage Scholarship Fund		15.00
" " " Emergency Salary payment		15,550.00
" " " Unrestricted		10,499.35
Doll, Grace Weld Soper, Estate, for Library at Sage		15.00
Eastman, A. R., for Agricultural Speaking Prize		100.00
Eastman, A. R., for Eastman Stage		3,000.00
Frasch, Herman, for Industrial fellowship		200.00
Genesee Fruit Growers' Association for Industrial fellowship		300.00
Hollingworth, W. G., for Veterinary Honorarium		50.00
Huntington fund for Medical College at New York		660.00
Johnston, Livingston, Fund for Medical College, New York		1,500.00
Kenney, Eudorus C., Estate for scholarship fund		38,522.52
Miller, Dr. Frank H , for Jane Miller Veterinary Prize		50.00
Morrison. J. T., Estate for Prize in poetry		100.00
Niagara Sprayer Co. for Industrial fellowship		650.00
Reid, Mrs. Whitelaw, for Medical Salaries in Bellevue		1,000.00
Sheldon Memorial fellowship, Medical College at New York		400.00
Stewart, S. L., for dairy prize		50.00
Student donation		50.00
Stone, Imogene, for Women's Loan fund		25.50
Williamson Vegetable Association for Industrial fellowship		750.00
Wilson, W. N., Estate for Scholarship Fund		3,851.25
		$117,732.64

CLASSIFICATIONS OF INVESTMENTS

Domestic Public Securities	.078	$1,221,726.12
Foreign Public Securities	.038	598,221.81
Railroad Bonds	.118	1,860,541.29
Public Utilities Bonds	.253	3,984,441.50

Lumber Bonds	.013	$ 219,000.00
Industrial Bonds	.209	3,291,000.00
Miscellaneous Bonds	.009	146,718.08
Railroad Stocks	.071	1,192,800.00
Bank Stocks	.006	105,750.00
Industrial Stocks	.031	490,800.00
Miscellaneous Stocks	.010	154,947.25
Real Estate Mortgages	.058	910,336.13
Loans on Collateral	.002	25,075.29
Real Estate (Investment)	.017	169,834.50
Land Contracts	.000	2,750.00
Residential Halls	.069	1,080,065.73
Special Deposits	.001	12,067.09
Cash and Ledger Balances	.017	270,520.05
	1.000	$15,736,594.84

BUILDINGS AND GROUNDS

Aside from the ordinary and usual care and repair of the buildings and grounds the work of this department has been confined largely to meeting the requirements of the Government Schools of Military Aeronautics and Vocational Training. An expense of over $50,000.00 was incurred for the erection and equipment of a mess hall and for floors and partitions in the Drill Hall, all of which has been met from fees received from students in the School of Military Aeronautics. On July 1, there was a credit balance to this account of $502.71.

A large part of the work on special improvements, for which provision was made in last year's budget, was postponed on account of the scarcity of labor and high cost of materials.

Itemized reports of the Treasurer and the Superintendent of Buildings and Grounds are appended hereto.

Respectfully submitted,
E. L. WILLIAMS,
Comptroller.

NOTE: The complete reports of the Comptroller, the Treasurer, and the Superintendent of Buildings and Grounds, containing the schedules referred to above and others, and bearing the certificate of audit of Messrs. Arthur Young & Co., certified public accountants, 71 Broadway, New York City, will be forwarded to alumni upon receipt of specific request addressed to the Comptroller, Cornell University, Ithaca, New York.

FORMS OF BEQUESTS TO CORNELL UNIVERSITY

GENERAL BEQUESTS

I hereby give, devise, and bequeath to Cornell University at Ithaca, N. Y., the sum of..... Dollars.

.....

BEQUEST FOR ENDOWMENT OF PROFESSORSHIP

I hereby give, devise, and bequeath to Cornell University, at Ithaca, N. Y., the sum of.....

..... Dollars as an endowment for a professorship in said University, the income from which said sum is to be used each year towards the payment of the salary of a professor of said institution.

.....

BEQUEST FOR SCHOLARSHIP

I hereby give, devise, and bequeath to Cornell University, at Ithaca, N. Y., the sum of.....

..... Dollars, the income from which sum is to be used each year in the payment of an undergraduate scholarship in said University, to be known as the..... .....scholarship.

BEQUEST FOR A PARTICULAR PURPOSE DESIGNATED BY THE TESTATOR

I hereby give, devise, and bequeath to Cornell University at Ithaca, N. Y., the sum of..... Dollars to be used (or the income from which said sum is to be used each year) for the purpose of..... .....(insert purpose).

APPENDIX I

REPORT OF THE SECRETARY OF THE UNIVERSITY FACULTY

To the President of the University:

SIR: I have the honor to submit the following report of the University Faculty for the year 1917–1918.

The Faculty held eight regular sessions and three special sessions. The latter were called to consider the following matters: (1) the granting of degrees to seniors who leave the University prior to the completion of their studies; (2) the determination of the University calendar for 1918–1919; (3) the consideration of communications from Alumni regarding an address delivered in Chicago by Professor Nathaniel Schmidt.

The question of granting degrees to seniors who enter the armed forces of the nation before completing the requirements for graduation has been under consideration by university faculties throughout the country. The conclusions to which they have come do not differ very radically. On March 29 our Faculty adopted the following resolutions:

Resolved: That scholastic and residence credit, if given, be granted only to such seniors as are absent from the University in the army or navy of the United States or of her Allies;

Resolved: That on and after April 2, 1918, members of the senior class who are in good standing and who leave the University for military or naval service in their last term of residence and within six weeks of the close of instruction, shall be graduated with their class, subject to the following protective limitations:

1. That they submit to their respective deans after the close of the semester a statement duly certified by the naval or military authorities that they are in active service in the army or navy;

2. That their engagement in this service was continuous from a date not later than ten days following their withdrawal from the University to the date fixed for graduation.

A year earlier (March 28, 1917), the Faculty provided for a somewhat longer absence of seniors for military or naval service without prejudice to their degrees. The general tendency in this and other universities has been to lay more stress on our educational requirements than was done last year, and to treat the privileges accorded for military or other national service with greater conservatism. Cornell University now makes no scholastic concessions for military service to students other than seniors, although last year we granted scholastic and residence credit not only for military service but even for such industrial work as was, in the estimation of the Faculty, of importance for the nation. A year's experience of the war has led the Faculty to set its face against academic profiteering on the basis of military service, and the conviction has steadily grown that underclassmen are more likely to render important service to the country, in the long run, by increasing their educational assets. The work of seniors, on the other hand, is substantially complete six weeks before the end of the academic year and, as no further university work is dependent on their courses of instruction, it is probable that this period of six weeks in the late spring can be put to more valuable use by training in camp or elsewhere for the earliest possible service in the armed forces of the country. The Faculty has endeavored to keep in constant view its

two-fold duty to education and to the nation in arms. To students other than seniors who enter the army or navy the Faculty has provided for the issuance of a war certificate, recording the student's academic status at the time of his leaving the University and the branch of service in which he is enlisted or commissioned.

The question of the calendar was intimately bound up with the question of national service. The Faculty was concerned primarily with the problem of securing the maximum length of summer vacation compatible with the complete satisfaction of the statutory requirements of the instructional year. The summer vacation, if sufficiently prolonged, was regarded as highly important for industrial work both by members of the Faculty and by students. It was therefore decided to consolidate the year by eliminating such within-the-year holidays as the Easter recess and Founder's day and by shortening the Christmas holidays. Acting on this principle, the Trustees and Faculty voted to open the year 1918–1919 on October 7, and to close the year on June 9, thus providing for the traditional examination periods of nine days each and the full number of instruction days. With the first date there is connected a matter of sentiment, for on October 7, fifty years ago, the University first opened its doors. The year 1917–1918 closed on the early date May 22. Holiday recesses within the year were either scaled down or entirely eliminated, and although there was considerable illness in the early part of the second term, apparently epidemic in character, the health of students at the close of the year was excellent, as shown by the records of the Infirmary and the Medical Advisers. There is no evidence that the health of students has suffered from the consolidation of university work. The effect of the curtailment of vacations on scholarship cannot be determined at the present date, but the record of the large group of university undergraduate scholars was higher for the second term of 1917–1918 than for the past two years and higher than in the first term of 1917–1918. This would appear to show that if the interests of study were not actually promoted by the abolition of brief vacation periods, they were at least not adversely affected.

Communications from the Alumni Associations of Chicago and Toledo and from an individual alumnus regarding statements alleged to have been made by Professor Nathaniel Schmidt on March 2, in Chicago, were presented to the Faculty at its April session. These statements referred more particularly to criticisms of the colonial policy of the British government. The Faculty elected a committee of inquiry and, after receiving a written report from Professor Schmidt, adopted the following resolutions recommended by the committee:

1. The Faculty concludes that the criticisms of Professor Schmidt to which its attention has been called have been adequately answered by his statement to the University Faculty.
2. The Faculty maintains that each of its members in writing or speaking has the same rights and duties as any other citizen.
3. The Faculty believes that each of its members in exercising his right of free speech should realize that in the mind of many citizens he occupies a representative position and that in consequence the reputation of the University lies partly in his hands.
4. The Faculty recognizes that each of its members is bound in the present crisis to safeguard the reputation of the University with especial care.

The press accounts of Professor Schmidt's address in Chicago were evidently inaccurate and in the absence of adequate stenographic reports of what Professor

Schmidt said, the Faculty found it impossible to conduct an inquiry into the *ipsissima verba* of the speech. However, the accuracy of the statement made by Professor Schmidt in his communication to the Faculty was confirmed by a report received by the committee from the presiding officer of the Political Equality League, under whose auspices the address was made. Furthermore, the statement is unequivocal in its expression of loyalty to the American government, in its appreciation of our British ally, and in its condemnation of the German government and its militaristic ideals and methods. While the complaint of the Alumni shows their vigilant interest in the welfare of the University and of the government, the adoption of the resolutions as above recited leaves no room for doubt as to the Faculty's opinions and sentiments on the matter in question. The statement of Professor Schmidt filed with the Faculty, the essential parts of which have been published in the *Alumni News*, removes presumably the grounds of complaint.

On the recommendation of the Faculty the Board of Trustees established the degree of Bachelor of Science in Architecture (B.S. Arch.) The Faculty made the recommendation for the new form of degree in order to provide for a curriculum which would have special reference to construction and architectural engineering.

The personnel of the Faculty was affected in an important and fortunate way by the action of the Trustees of the University in making "extension professors," appointed after December 15, 1917, ineligible to seats in the University Faculty or existing college faculties. It is highly desirable that the educational policy of the University be determined by professors who are engaged in the actual work of instructing students in the several colleges, and who are in constant contact with local problems and needs in teaching and research, rather than with the work, in itself important, of disseminating scientific information for the use of the general public.

During the year 1917–1918 the military schedule provided for one period of three consecutive hours of drill each week instead of one-hour periods three times a week, as had long been a tradition. To this plan of a single weekly period of three hours there developed two objections: (1) no opportunity was given for battalion drill; (2) the three-hour period, when strenuously employed, was found to be a considerable physical strain on students untrained in this form of exercise. For the year 1918–1919 the Faculty has adopted a plan intended to provide for battalion drill and for a more extended form of work than was possible in the old one-hour plan. The Faculty thus seeks to retain the merits and to remove the disadvantages of the two abandoned methods, by requiring all cadets to drill two hours in one weekly period and one hour on Friday, at which time the entire corps will assemble.

Since the date of my last report the Faculty has lost from its membership by death Professor Emeritus Charles Lee Crandall, Professor Henry Augustus Sill, Professor Emeritus Charles Mellen Tyler, Librarian Emeritus George William Harris and Secretary Harry Alton Hitchcock. Appreciation of the life and work of these colleagues has been placed upon the records of the Faculty.

Respectfully submitted,

W. A. HAMMOND,

Secretary of the University Faculty.

APPENDIX II

REPORT OF THE DEAN OF THE GRADUATE SCHOOL

To the President of the University:

SIR: I have the honor to present the Report of the Graduate School for the year 1917–1918.

From the statistics appended to this report, it will appear that the attendance in the Graduate School during 1917–1918 was almost exactly 60 per cent of that for 1916–1917. As was to be expected, the loss in the Graduate School is a little greater than the average for the attendance of the University as a whole. It is probable that a larger proportion of graduate students have been called into various branches of public service than was the case among undergraduates. It is to be remembered also that nearly one-half of the graduate students in the University are usually recruited from those holding appointments as junior instructors and assistants, and that during the year 1917–1918 the number of these positions has been considerably less. It is, however, noteworthy that the number of women registered this year is also somewhat less than in 1916–1917, being 54 as against 65 in the previous year.

The Faculty of the Graduate School held five meetings during the year. Perhaps the most important legislation enacted was that which allows graduate students in some subjects to count as residence for the degree of Doctor of Philosophy a certain proportion of time spent in the laboratories of industrial plants outside of Ithaca. This was regarded as the extension of a principle already recognized by the Graduate School, rather than as the adoption of anything radically new. It has been customary to regard candidates for the doctorate as technically in residence who are registered in the Graduate School, but who are carrying on investigations outside the University under the direction of a member of the Faculty of the Graduate School in a library or libraries, either in this country or abroad. Similarly, candidates for the doctorate have been allowed to spend a certain amount of time in the field collecting material to be used as data in the dissertations submitted by them for the degree. The Faculty believed from the information submitted to it that it is now desirable that students of certain physical sciences should sometimes be encouraged to take advantage of the opportunities for investigation provided by various industrial plants, and for this purpose should be permitted, while carrying on their candidacy, to reside for a time outside of Ithaca. In granting this permission, however, the Faculty imposed proper safeguards — providing that in no case shall the candidate receive remuneration for services from outside parties, requiring that he shall report regularly to the Chairman of his special committee regarding the progress of his work; and also limiting the maximum amount of time thus to be spent away from the University to one year. This legislation is regarded by some members of the teaching staff as of great importance, since it recognizes for the first time the advantages to be gained through a closer co-ordination of the

work done in the University in the physical sciences with the investigations carried on in laboratories connected with certain industrial plants.

The effect of the war, both present and prospective, upon the Graduate School is a subject that raises many important problems at the present time. Though the immediate effect of the war may be to stimulate research in certain fields, it cannot be doubted that its total influence will render it difficult to maintain at its present level the advanced study and investigation represented by the organization of the Graduate School. Yet now, more than ever, it is important that this part of the work of the University should not be neglected. In an institution that claims to rank as a university, the work of investigation and inquiry can never be laid aside as a luxury or a non-essential part of its life. It should not be forgotten that while all the ranks and divisions of the University made a splendid response to the demand of the country for men to carry on the war, it was through its ability to supply scholars equipped for carrying on investigations and directing enterprises in various fields that the University made its *distinctive* contribution to the national cause. Without the opportunities for special training afforded by graduate study there would have been among us no such a body of men ready to be called into the service of the country. Nor in this connection should one think only of the services of the men trained in the physical and applied sciences, though these are most direct and obvious. No one can doubt that the graduate students of literature and history and philosophy who have entered military service are also rendering indispensable service in this war for freedom and democracy.

The fact that so many of the younger generation of scholars have been called into the service of the nation explains why, as already said, there is great difficulty in maintaining the level of graduate work at the present time, and also why now more than ever it is important that this should be done. With the loss of so many active men, and the consequent pressure on those who are left behind to furnish instruction for undergraduates, there is serious danger of a decline of interest in productive scholarship and in the real vitality of the life of the University. Indeed, it will be easy to lose during a few years of war a large part of what we have gained in this respect during the past forty years. It should be recognized that this is a danger just as real, and in many respects more serious, than the decrease in number of students. The situation cannot be met by simply waiting until the war is over, on the assumption that normal conditions will then be automatically restored. The spirit of inquiry must be maintained and the work of training scholars go on continuously: these things cannot be merely postponed, and then taken up on the former level at some future time. It is all-important that there should be no dimunition of interest in this side of the work of the University, and that every possible opportunity and encouragement should be given to graduate study at the present time. The Graduate School has before it the urgent task of training up a new generation of scholars and investigators to take the place of those who have gone.

The Conference Committee of the Faculty of the Graduate School (consisting of Professors E. L. Nichols, C. H. Hull, and the Dean) has, after much consideration of the subject, recommended to a Committee of the Board of Trustees that a uniform fee be charged all students registered in the Graduate School without

any reference to the particular departments or divisions of the University in which their work may be done. The Conference Committee is convinced that while a small fee paid by all graduate students would yield as large a sum as that received from tuition under the present system, the educational advantages which would follow the adoption of the principle which it advocates would be of very material importance. In this judgment the Committee was confirmed by the opinions of the members of the Faculty with whom it consulted, and especially by the judgment of the Deans of the State Colleges and of the representatives of the Faculty on the Board of Trustees. Moreover, the Conference Committee believes that the adoption of some such policy as that recommended is specially desirable because of conditions created by the war. I beg respectfully to request you to call the attention of the Board of Trustees to the need of action in regard to this question of tuition in the Graduate School. As I understand the matter, the University has at present no legislation on this subject.

I would also respectfully recommend that the Board of Trustees be requested to consider the advisability of establishing a Council for the Graduate School, of a character somewhat similar to that of the Councils which already exist for the Colleges of Agriculture and of Veterinary Medicine. Of this Council the President of the University should be Chairman, and it should be composed of representatives of the Board of Trustees and the Faculty of the Graduate School. It is of the utmost importance that there should exist a body of men, including the President and Trustees of the University, specially interested in the work of the Graduate School, and in planning for its development. Such a Council would naturally have for its province, not any one college or division of the University, but the maintenance and promotion of active scholarship throughout the institution as a whole; and the association of Trustees and members of the Faculty in this enterprise would seem likely to be stimulating and productive of good results. I believe that one important result which would follow the creation of a Council for the Graduate School would be a better understanding on the part of the Trustee members of what is at present being accomplished in the University on behalf of the advancement of knowledge, and also a clearer realization that the development of this work is absolutely essential to the life of the University. This is a doctrine which as President you, Sir, have frequently brought to the attention of the Board of Trustees; but active participation in the work of such a council as that recommended would afford to the Trustee members an opportunity to examine and verify these conclusions through a direct personal knowledge of the conditions, and would increase their interest in this side of the University's work. In the present crisis, the need of such a body devoted to the interests of graduate studies in the University is even greater than in normal times, as it is now more difficult than ever to maintain this interest, and also more than ever important that our best efforts should be expended to prevent loss in this direction.

There were 81 advanced degrees granted by the University in 1917–1918, as compared with 109 in 1916–1917. The detailed comparison of the several degrees is as follows:

	1917–18	1916–17
Doctor of Philosophy	36	43
Master of Arts	20	33
Master of Science	4	1
Master of Science in Agriculture	15	16
Master in Forestry	3	4
Master of Civil Engineering	1	4
Master of Mechanical Engineering	0	4
Master of Architecture	1	2
Master of Landscape Design	1	2
Total	81	109

The General Committee this year devoted nine meetings to the consideration of the educational and administrative problems of the Graduate School. The Committee was composed of Professors C. E. Bennett, W. H. Chandler, C. H. Hull, D. Reddick, F. K. Richtmyer, H. Ries, W. A. Riley, W. M. Sawdon, N. Schmidt, W. F. Willcox, with the Dean as chairman.

Respectfully submitted,

J. E. CREIGHTON,

Dean of the Graduate School.

STATISTICS OF ATTENDANCE

In the Graduate School, during the academic year 1917–1918, there were registered 279 students, in addition to 123 registered during the summer of 1917.

	1917–18	1916–17	1915–16	1914–15	1913–14
Number of students registered during the academic year	279	467	482	390	386
Number of students registered during the Summer of 1917:					
1. Summer Session	33	55	45	39	34
2. Third Term in Agriculture	68	128	85	28	—
3. Under Personal Direction	22	30	17	65	19
Total in Summer	123	213	147	132	53

Classified according to the Degrees for which they were Candidates:

	Academic Year	Summer Term
Doctors of Philosophy	152	65
Masters of Arts	50	35
Masters of Science	13	3
Masters of Science in Agriculture	13	8
Masters in Forestry	1	1
Masters in Landscape Design	1	1
Masters of Architecture	3	—
Masters of Civil Engineering	7	—
Masters of Mechanical Engineering	3	—
Not Candidates for a Degree	29	8
Unclassified	7	2
Total	279	123

Classified according to the group in which the major subject falls:

	1917–18	1916–17	1915–16	1914–15	1913–14
Group A, Languages and Literatures	35	39	52	56	47
Group B, History, Philosophy, and Political Science	35	61	62	45	48
Group C, Physical Sciences	40	77	75	95	83
Group D, Biological Sciences	145	259	243	220	175
Group E, Engineering, Architecture	17	26	50	30	29
Unclassified	7	5			

Among the students registered in the Graduate School during the year 1917–1918, there were graduates of 96 different institutions distributed as follows:

Aberdeen University	1	University of Nanking	1
Alfred University	2	University of Nebraska	2
Allegheney College	1	New Hampshire A. & M. College	1
Arkansas University	1	North Carolina A. & M. College	1
Ateneo de Manila	1	University of North Dakota	1
Bates College	1	North Dakota Agricultural College	1
Bridgewater College	1	Northwestern University	1
Brigham Young University	2	Oberlin College	1
Brown University	2	Occidental College	1
Bucknell University	1	Ohio State University	5
University of California	1	University of Oklahoma	2
Clark University	1	Oklahoma A. & M. College	1
Clemson Agricultural College	1	Oregon Agricultural College	1
Colgate University	3	University of Oregon	1
Colorado Agricultural College	2	Pekin Government University	1
Colorado College	1	University of Pennsylvania	1
Connecticut Agricultural College	1	Pennsylvania State College	4
Cornell University	121	University of the Philippines	3
Dartmouth College	1	Pomona College	2
Denison University	3	Queen's University	1
Elmira College	2	Radcliffe College	1
Furman University	1	Rice Institute	1
Government Institute of Technology, China	1	Rochester University	3
Grove City College	1	Royal Danish Agricultural College	1
Guilford College	1	Rutgers College	1
Harvard University	1	Soo Chow University	1
Hobart College	1	University of Southern California	1
Howard Payne College	1	Sophie Newcomb College, Tulane University	1
Huron College	1	Swarthmore College	1
University of Illinois	3	Syracuse University	2
University of Indiana	3	Tangshan Engineering College	1
Indiana State Normal School	1	Texas A. & M. College	2
Iowa State Teachers College	2	University of Toronto	1
Iowa State University	2	Tokyo Agricultural College	1
University of Kansas	5	Trinity College	1
Kansas State Agricultural College	3	Tufts College	1
Kyota Imperial University	1	Utah Agricultural College	3
Lawrence College	1	University of Utah	1
Lehigh University	1	Vassar College	4
Leland Stanford University	1	University of Vermont	1
University of Maine	1	Wabash College	4
Miami University	1	Washington State Agricultural College	1
University of Michigan	3	Wellesley College	8
Michigan Agricultural College	1	Western Reserve University	1
Middlebury College	1	University of West Virginia	1
University of Minnesota	4	University of Wisconsin	3
University of Missouri	1	Yale University	2
University of Montana	2		
Mt. Holyoke College	3		

APPENDIX III

REPORT OF THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

To the President of the University:

SIR: As Dean of the College of Arts and Sciences I have the honor to submit to you the following report for the year 1917–1918.

Last year the Faculty established the degree of Bachelor of Arts with Honors, the general requirements for which were described in my report of 1916–1917. During the session which has just come to an end the new plan has been put into operation; a number of departments have admitted students to candidacy for Honors, and three departments recommended students for the degree with Honors, two in English, one in the French Language and Literature, and one in Biology. While the Faculty has outlined the conditions essential for admission to candidacy, it has laid down no hard and fast rules to be followed by every department in determining the candidate's course of study. It was thought best to give the different departments a large measure of freedom in working out the details of the general plan, and to ask them to submit their recommendations to the Committee on Educational Policy for approval. A richer experience will doubtless suggest to us the wisest method of procedure in the future; in the meanwhile the Committee on Educational Policy has expressed the opinion (1) that highest honors should not be awarded; (2) that a comprehensive written or oral examination (or both), covering the honors subject or subjects, should be taken by every candidate before the end of his senior year; (3) that the requirements with regard to either courses or subjects be not made too specific; and (4) that narrow specialization be regarded as not in accordance with the spirit of the system of honors. It is expected that the Committee will offer some recommendations in the course of the coming year aiming at such improvement of the methods already adopted as may be desirable.

The "honors system" enables juniors and seniors who have shown ability and industry to do a higher and more advanced type of work than is required of the average denizen of the College by providing opportunities for individual instruction. The Faculty has also made entrance into the Graduate School easier by permitting a student who has satisfied all the requirements of graduation except in respect of residence to register both in the College of Arts and Sciences and in the Graduate School. Heretofore it has been necessary for such a student to be recommended by a committee consisting of the Dean of the College and two other members appointed by him, before being considered by the Graduate School; in accordance with the new rule any student who has completed 120 hours may apply for admission, and the selection of those who are fit to begin research work will be left to the judgment of the Faculty under whose supervision they are to carry on their studies. It has been pointed out that, owing to the almost unlimited freedom given to a member of the Graduate School, it would be possible for a person of indolent habits to spend his time in blissful idleness; there is every hope, however, that the Faculty of the School will admit only those who have shown

evidence, during their undergraduate career, of intellectual ability and diligence, and whose past achievement gives promise of a fruitful scholarly life. Should the fears of the doubters be realized, our College may at any time withdraw the privilege which has been accorded in the belief that it will tend to raise the standard of scholarship.

But the College should, in my opinion, go still further in its efforts of reform; it should give careful consideration to the so-called underclass requirements and to the upperclass group system, to the apparent deficiencies of which attention was called in my report of last year. If it is true, as seems to be the case, that the range of subjects embraced under most of the groups is too wide, and that there is a serious lack of advanced courses, then the system fails of its purpose, which is to enable the student to specialize in some branch of study and to learn at least one thing fairly well. A person who dips into a multitude of subjects and never gets beyond elementary introductions will not develop sufficient intellectual backbone to enable him to do independent mental work. We have now made it possible for a small number of gifted students to exercise their capacities in serious tasks; the question arises whether any one ought to be allowed to pass through the College who has gained nothing but a superficial knowledge of a mass of things. Professors everywhere complain that the colleges are full of men and women who have no intellectual interests, who are never tempted to go beyond the requirements of the daily lesson, who have no yearning whatever for the lauded joys of scholarly achievement; if this is so, the blame rests upon the colleges themselves. We cannot find relief by railing at the spirit of the times; an institution of learning that is the mere weathercock of the unhealthy currents of an age is untrue to its mission of leadership and cannot escape censure.

Many members of our Faculty believe that the quality of our student body might be improved by a more careful selection of those who seek entrance, and this question was discussed in the University Faculty, but postponed on account of the outbreak of the war. The view was advanced that students admitted upon certificate show less aptitude than those who pass entrance examinations, and it was suggested that the adoption of a scheme similar to the Harvard plan might yield good results. It is to be hoped that this problem will be taken up again at a more favorable time. In the meanwhile, the Committee on Academic Records has considered the advisability of not adhering too rigorously to the entrance requirements, owing to the disturbances caused by the war, and decided to make slight concessions with regard to prescribed subjects in a number of instances. Experience, however, seems to have shown that there has been a rather striking percentage of failures among those students in whose cases exceptions were made, thus leading to the inquiry whether a deviation from our usual entrance requirements has proved wise. It will be necessary, however, during the next few years, to make some adjustments with regard to German, which is being dropped from the curricula of many secondary schools in the country; and the Committee has already outlined a plan which will meet the situation.

In accordance with resolutions adopted by the University Faculty on March 29, the Faculty of the College recommended for graduation all those seniors who were in good standing and who left the University for military or naval service in their last term of residence and within six weeks of the close of instruction. The Faculty also resolved that the cases of students who, at the close of the present

university year (May 22, 1918), lacked for their graduation only the hours and the residence of a six weeks' summer session, should be assimilated to those covered by the action of the University Faculty of March 29; and seniors belonging to this group were likewise recommended for the degree. At its meeting of March 3 the Faculty of the College voted "that the Committee on Educational Policy be requested to consider and report upon the advisability of modifying our present requirements for graduation with a view to decreasing the residence requirements under such safeguards as may seem necessary, in order to meet the new conditions created by absences consequent to the war." The Committee reported that a motion "that students be recommended for graduation on May 22, 1918, who by that date will have satisfied all academic requirements except in respect of residence if they have previously entered military or naval service and are in service at that date" had been lost by a tie vote in committee. It also reported the following resolution: "That the Committee does not now advise any specific abatement in the requirements for the degree of A.B., but suggests that abatements from requirements for the several degrees, if any, should be as clearly uniform in effect throughout the University as practicable, and that they therefore be considered by a faculty whose decisions can have a general effect rather than by the Faculty of Arts and Sciences." These reports were received and ordered to be placed on the records of the meeting of the Faculty, which was held on April 5, the University Faculty having in the meanwhile declined to decrease the residence requirement beyond the period of six weeks, as described in the resolution referred to above. Many members of our Faculty, however, seem to be in favor of decreasing the residence requirement, at least for such students as have completed the minimum number of hours (120) required for graduation. The question will come up for discussion next year, the Faculty having requested the Committee on Educational Policy "to consider and report upon the requirements for graduation in respect of a requirement of residence, hours and quality of work, and concerning other matters connected with requirements for graduation."

Respectfully submitted,

FRANK THILLY,
Dean of the College of Arts and Sciences.

APPENDIX IV

REPORT OF THE DEAN OF THE COLLEGE OF LAW

To the President of the University:

SIR: I beg to submit the annual report of the Dean of the College of Law for the year 1917–1918.

The entrance of the United States into the war in April 1917, the opening of the Officers' Training Camps in the following May, the general call for service of various kinds contributing to success in the war, naturally and properly disturbed for a time the course of all educational work in the college as elsewhere. During the last few weeks of the academic year 1916–1917 scarcely any real effort was devoted to study, and all minds seemed directed toward the great issue. But with the resumption of work in the fall, students in the College having in mind the admonition of President Wilson and yourself that those who are in college should intensify their endeavor to prepare for the serious events of the future, took up and continued their work with earnestness. Consequently, the program for the year was carried through successfully and without undue distraction. Some students left during the year for national service, including twelve from the senior and junior classes

In May 1917 Professor Bogert was granted leave of absence for the period of the war. He is at present Assistant Judge Advocate of the 78th Division, with the rank of major. During the past year Professors Stagg and McCaskill have received very advantageous offers to go elsewhere, but happily we have been able to retain their valuable and highly appreciated services.

The absence of Professor Bogert necessitated a readjustment of the curriculum, for in accordance with the policy of the University during the war every attempt is being made to accommodate our work to the present emergency. By temporarily dropping the nonresident lectures and one regular course, by consolidating classes for other courses, by reducing in some cases the number of hours allotted to a few other courses, and by a distribution of Professor Bogert's courses among other members of the faculty, our curriculum has been so revised that, while we are restricted in our efforts, the substantial efficiency of the work has not, it is thought, been too seriously affected.

The registration in the College of Law for the years 1916–1917 and 1917–1918 was as follows:

	1916–17	1917–18
Seniors	38	18
Juniors	51	35
Second year of four-year course	57	35
First year of four-year course	83	81
First year of three-year course	18	20
Special students	6	2
Total law students	253	191
Students from the College of Arts and Sciences electing law work	44	17
Total receiving instruction in the College of Law	297	208

In 1917–1918 there was a decrease of 25 per cent from the preceding year in the registration of law students, a falling off due to the war. The decrease is larger in the upper classes where the higher age brings the students within the selective draft or renders them capable of governmental service. For the same reason there was a marked decrease in the number of students from the College of Arts and Sciences electing work in the College of Law. On the other hand, the number of freshmen entering the four-year course in the fall of 1917,— these being young men coming directly from preparatory schools,— shows a decrease of only two as compared with the freshmen entering the preceding year. In our two upper classes the decrease was approximately 40 per cent, a loss of attendance that, considering the cause, is a source of pride rather than regret. In 1916–1917, 40 per cent of our students were from outside of New York State. In 1917–1918 the number was 44 per cent distributed as follows: New Jersey 23, Pennsylvania 13, Ohio 11, Connecticut 7, Illinois 4, while one or two came from each of a number of other states.

Despite the necessary curtailment of the library appropriation and the substantial increase in the price of books, the library accessions during the year were 1018 volumes, as against 1325 volumes in 1916–1917. Of the accessions in 1917–1918, 167 volumes were gifts as against 225 volumes in the preceding year. The total number of volumes in the law library on May 1, 1918, was 51,115. The law librarian, Mr. Willever, is meeting the changed conditions in the book and book-binding trade with commendable economy and skill,— factors of decided importance in the administration of the law school at the present time. The annual report of the law librarian is submitted herewith.

Since the date of my last report, the College of Law has completed its thirtieth year. During that period the graduates of the College of Law aggregate 1508.

Respectfully submitted,

EDWIN H. WOODRUFF,

Dean of the College of Law.

APPENDIX V

REPORT OF THE DEAN OF THE MEDICAL COLLEGE

To the President of the University:

Sir: I have the honor to submit herewith a report of the Medical College for the year 1917–1918.

It is my painful duty to record the deaths of the two men who were chiefly responsible for the establishment and development of the College.

Lewis A. Stimson, Professor of Surgery since the foundation of the College, whose long friendship with our generous benefactor led him to provide a building and turn over a liberal endowment to Cornell University for the use of the Medical College in New York City, wise and respected counselor and administrator, stimulating teacher and truly great man, suddenly died on September 17, 1917. The entire faculty felt that one of the main supports of the College had been lost but none felt it so acutely as did Dean Polk, whose burdens were increased and who lost a trusted adviser by Professor Stimson's death. A memorial service was held at the College in November 1917 when addresses were made by several of his friends and colleagues. It is a cause of gratification to all connected with the College that Professor Stimson's children are having a bronze medallion bust made of their distinguished father which, together with a tablet with an appropriate inscription thereon, will be placed in the College that his name may be perpetuated through future generations.

A further and, if possible, still greater loss came to us when on June 23, 1918, William M. Polk, Dean of the Medical College and Professor of Gynecology since the founding in 1898, died after a brief illness. The multitude of problems which were precipitated by the war exacted a heavy toll of his abounding vigor and it was with great effort that he presided at the graduating exercises, this being his last public function in behalf of the College for which he had so long labored with all of his great powers. Dean Polk was naturally a leader among men and brought to his office rare qualities of strength, character, and dignity combined with tact and kindly sympathy which made him unsurpassed in such a position. Though trained in the old order of medical things he was not unreceptive to the new. On the contrary he early saw the defects in the methods of medical education and with broad vision quickly became foremost in establishing the new criteria by which medical colleges are judged. The Cornell University Medical College is a monument to its first dean, William M. Polk.

Thus in the past year have the foremost members of the original group of men who carried the heavy burdens of our College in the early days passed away. Another generation must assume their responsibilities guided by the inheritance left by these great men.

The College has also sustained two other irreparable losses in the deaths of Professor Weil and Professor Johnston.

Richard Weil, Professor of Experimental Medicine since 1916, having previously held responsible research and teaching positions in the fields of pathology

and immunology since 1905, was among the first to respond to his country's call and after a short detail at Fort Benjamin Harrison was promoted to be a Major in the Medical Reserve Corps and made Chief of the Medical Service at Camp Wheeler, Macon, Ga. Because of an epidemic of measles and pneumonia his duties were exceedingly wearing and he contracted pneumonia which terminated his life on November 19, 1917. Major Weil's work was chiefly along lines of research in which field he gained an international reputation for himself and the College and in his untimely death we have lost one of our most brilliant scientists, as well as a cheerful, lovable companion.

James C. Johnston, Assistant Professor of Dermatology, since 1908, died on May 10, 1918. Professor Johnston had been a member of the staff of instruction since 1898, when he was appointed Instructor in Pathology. Subsequently he specialized in the pathology of skin diseases contributing many notable articles to the literature of his specialty. He was granted leave of absence to go to France for the American Red Cross in January 1918 but he had been abroad but a few weeks when the malady which subsequently caused his death became evident and he was obliged to return home and wait the end.

Professor Johnston's teaching was characterized by lucidity, originality, and enthusiasm for his subject and his passing leaves a place which cannot be filled.

The year has been further deeply marked by the active participation of our country in the great war which has caused the withdrawal of a large number (51) of our staff to enter military service, and at the same time has added to the work of those remaining. Immediately upon the declaration of war the late Dean announced that every resource of the institution should be placed at the disposition of the Government and every decision with respect to College activities has been reached only after careful consideration regarding its effect upon the outcome of the war. It soon became clear that the Government considered the maintenance of the Medical Colleges at a high state of efficiency for teaching essential for the development of the military establishment. At the same time many of our skilled scientists and clinicians were in receipt of requests to enter upon various special lines of work for the Government and it has been exceedingly difficult to arrive at a proper decision in such cases bearing in mind the welfare of the country and effective teaching at the same time,— particularly, as without exception, the desire of the men concerned has been to enter government service and it has been difficult to persuade them that their services are of greater value to the College than to the military establishment. It is hoped that some method will be devised whereby the decision in such cases will be made by the Government and recognition given to those men who are not allowed to directly enter military service because of the needs of the College.

Besides added teaching made necessary by the absence of other men in military service there are few of our staff who are not engaged in work more or less directly contributing to the prosecution of the war. In response to a request from the Surgeon General's Office a course of instruction on Fractures and War Surgery was, with the approval of the Dean, organized by Professor (Major M. R. C.) Hartwell in November 1917. The course which occupies one month was designed for officers of the Medical Reserve Corps and is given at the College and in Bellevue Hospital to groups of from ten to twenty-five men, 125 having

now completed it. It is very comprehensive and requires teaching by the Departments of Surgery, Pathology, Anatomy, Physiology, Bacteriology, Chemistry and Hygiene, which in most instances has been given by the heads of the departments concerned. The comments received from official and non-official sources indicate that the course has proved of great satisfaction to those instructed and to the Surgeon General's Office.

Another very important accomplishment has been the establishment of the School of Military Roentgenology with headquarters at the Cornell University Medical College where over 350 officers, together with a considerable number of technical assistants have received instruction in this important branch of the service. This has been organized by Professor (Major, Sanitary Corps, N. A.) Shearer of the University Faculty in cooperation with our Department of Roentgenology. Major Shearer, in his report to Dean Polk, says: "May I express both on behalf of the Surgeon General's Office and personally, our grateful appreciation for the courtesies so fully extended by yourself and the institution, without which, whatever measure of success we may have attained would hardly have been possible."

At the request of the Adjutant General a Medical Advisory Board was organized with headquarters at the College. The members were enrolled from the staff of instruction and all of the clinical departments are represented in this important, though onerous work. Our hospital and dispensary services have also made many special examinations for recruiting stations as well as given medical and surgical care to many soldiers, sailors, and recruits.

Despite the absence of the heads of several departments, reduction in the number of teachers, and the many added burdens incidental to the war it is my opinion that the quality of the instruction given has fallen little, if any, below our standard. The field of activity which has chiefly suffered has been that of research. This is a cause of regret yet it will be impossible to accomplish very much until the return of more normal conditions, for the care of the sick and teaching must assume precedence. The scientific departments have, however, made a number of notable contributions during the year and contemplate further researches. I would especially call your attention to the work of Professor Stockard and his collaborators on the causes underlying abnormal development and the influence of the glands of internal secretion; to Professor Wiggers' reinvestigation of the shock problem, undertaken for the National Research Council; to Professor Benedict's study of the chemistry of antiseptics and his continued research on carbohydrate metabolism under the Clark fund, and to Professor Ewing's several publications on tumors and on the position of radium in cancer therapy.

Professor Ewing calls attention to the increased difficulty in securing pathological material by a ruling of the Corporation Counsel of the City of New York which forbids taking specimens from bodies at autopsies for the purpose of demonstrating to students. This is a matter which has become increasingly serious as it is impossible to maintain medical education, and thereby the standards of medical practice, under the conditions which prevent the gathering of pathological material for the instruction of students. As Doctor Ewing remarks "Such a hindrance to the dissemination of fundamental knowledge of medicine as now exists in New York is a disgrace to the community, is a condition which has never

before existed in New York, and calls for vigorous action on the part of all teaching institutions and intelligent physicians." The only complete remedy must proceed from legislative action which will allow or better still make mandatory an autopsy on every person dying in a public hospital. This can be attained only by the education of the public, and all who are interested should lose no opportunity for bringing it about.

The College has further extended its field of activities by affiliating itself with the Clinic for the Functional Re-Education of Disabled Soldiers, Sailors, and Civilians. The Clinic has been organized by Emeritus Professor W. Gilman Thompson and has been made possible by a generous donor by whom its continuance is guaranteed for the next five years. It is designed primarily as a contribution for war service for the treatment of the mutilated of our Army and Navy and it affords instruction to medical officers and students for the training of expert operators in the various departments of the work. The staff consists in greater part of members of the faculty of the College and will afford us another field for instruction in orthopedics.

In concluding this report I beg to call your attention to the rapidly increasing demands for instruction in Public Health and Industrial Diseases. This is a field which must rapidly broaden and which has as yet been but little developed. New York and its environs offer unsurpassed facilities for field work and many members of the Faculty feel that we should take advantage of our favorable location. Just at present it does not seem wise to undertake the establishment of such a school but the question should be seriously considered for the near future.

Respectfully yours,

WALTER L. NILES,
Acting Dean of the Medical College.

APPENDIX VI

REPORT OF THE SECRETARY OF THE ITHACA DIVISION OF THE MEDICAL COLLEGE

To the President of the University:

SIR: As Secretary of the Ithaca Division of the Medical College, I have the honor to present my fifteenth annual report covering the work of the year 1917–1918.

As with the other colleges of the University, no report was submitted for printing last year.

STUDENTS

In 1915–1916, there were 25 students, last year 28, and this year 30. Of these thirty, 12 were women, 6 seniors in Arts and Sciences of Cornell University and 1 in the University of Maine; and 5 were graduates of other institutions. Of the eighteen men, 17 were seniors in Arts and Sciences and 1 a graduate.

The effect upon the work of the students of the entrance of the United States into the war was more marked last spring than this year. The action of the War Department in permitting medical students of draft age to enlist in the Medical Enlisted Reserve with the consequent classification in group five has had a decidedly steadying effect. All of our men who were eligible were duly enlisted and have been permitted by the Surgeon General to continue their studies. The plan is to permit those who do good work to continue their course until imperatively needed while those who do not maintain high standards will be immediately called to active service.

FACULTY

We have been most fortunate in the loyalty and stability of our Faculty. Until about the middle of the second term this year, all have remained with us. At that time in the Department of Histology and Embryology, Dr. Kingery, Mr. Stewart, and Mr. Latta relinquished their University work in order to enter the service of the government in connection with the war; and Professor S. H. Gage, after ten years' absence from the laboratory and lecture room, in order to help out in this emergency has resumed his teaching with his old time energy, enthusiasm, and effectiveness. The Faculty most heartily appreciates the spirit which prompted him to volunteer his services and to relinquish for the time being his research work and pension under the Carnegie Foundation.

At the request of the Albany Medical College of Union University, Dr. Dresbach was granted a leave of absence from January first to the end of the year and he has since resigned to accept the headship of the Department of Physiology there. He has been associated with the Department for over ten years and his loss is much regretted and will be keenly felt.

While provision has been made for the students continuing their course by enlisting in the Medical Enlisted Reserve, as yet no arrangement has been perfected for the assistants and instructors of draft age who teach these students.

It is hoped that before long the government will find some way of providing for the retention of these younger teachers who are most of them also studying for advanced degrees and engaged in research. It seems reasonable to ask that the essential teachers of the Medical Enlisted Reserve should receive as much consideration in regard to inactive military duty as the students are now receiving. If this is not done, before another year, I fear that all of our younger instructors and assistants will be in the military service of the government.

DEPARTMENTS

In regard to the details of the work in the departments of Anatomy, Histology and Embryology, and Physiology and Biochemistry, I would refer you to the separate reports from each department which I am herewith transmitting.

RESEARCH

Although the amount of research is somewhat less than usual owing to the many distractions more or less directly connected with the war, at the same time some work has been completed and much is under way in each of the departments.

NEEDS

The material needs of each department that were absolutely essential have been met so that the effectiveness of the teaching has not been in that way interfered with. All growth and expansion has been restricted to the lowest possible amount in every way. The high cost of all materials has effected the departments in the Medical College as in other colleges of the University.

The war has emphasized as never before the imperative need for more physicians but the Surgeon General of the Army has pointed out that it is not numbers alone that are required but that quality is even more important. Our school is eminently fitted to train the highest type of medical men and it is hoped that those interested in the advancement of Medical science may seize the opportunity to enlarge the endowment, especially of the Ithaca Division, so that our work may be more effective and may in no way be interfered with. The efficient work of the medical department in preventing disease in the army has emphasized the need of well trained physicians in civil life. There is no doubt that the opportunities and demands for medical men and women after the war will be tremendously increased. That we may expand both in research and teaching to meet these needs will demand increased appropriations. No better use could be made of money than its gift to Medical Colleges, and I again appeal to all our friends and former students to obtain for us increased endowment at this time.

Respectfully submitted,

ABRAM T. KERR,

Secretary of the Ithaca Division of the Medical College.

APPENDIX VII

REPORT OF THE DEAN OF THE NEW YORK STATE VETERINARY COLLEGE

To the President of the University:

SIR: I have the honor to submit herewith a report of the New York State Veterinary College at Cornell University for the academic year 1917–1918.

The work of the college has progressed satisfactorily and on the whole it has been as efficient as could be expected under the existing war conditions. The most noteworthy educational feature is the closing of the three-year curriculum. The second year of the four-year course is now being given.

The shifting of the center of veterinary activities from the city to the country calls for a much more comprehensive course of instruction than heretofore has been given. The diseases of the food producing animals have come to be of much economic significance and their control is not only a difficult but also an important task at a time when the nation needs a maximum production of animal products.

The teaching has suffered as a result of changes brought about first by the resignation of three of its members to take positions in institutions in other states and secondly by the entrance into the military service of two of its experienced teachers. Further, the places of three assistants and one instructor have not been filled on account of the reduction in the number of entering students. These changes have influenced temporarily the research work and, to some extent, the quality of the teaching in the departments affected.

There are 107 students registered in the college which is a reduction of 47 from last year. They are distributed among the three classes as follows: Freshmen, 19; Sophomores, 27; Seniors, 61. The large senior class is due to the unusual number of matriculants in the fall of 1915, occasioned by the announcement that in 1916 the four-year curriculum would begin. The reduction in the freshman class is attributed largely to conditions brought about by the war. A total of nineteen students, representing all classes, was taken by the draft. A large percentage of the students are enlisted in the Medical Enlisted Reserve Corps and we are informed that those in the senior class will be called into service immediately after passing their state examination for a license to practice.

The conditions which influenced the attendance of undergraduates during the time between the starting of the college and the attainment of the four-year course with university entrance requirements may be divided into three groups, namely: (1) from 1896 to 1904, during which time students could enter with 24 regents' counts; (2) from 1905 to 1915, when the requirements were 72 regents' counts for entrance and a three-year course of instruction; and (3) from 1916, with graduation from a high school for entrance and a four-year course. The average annual registration of undergraduates during these periods was as follows:

(1) Average number of students in attendance, 1896–1904 was 48
(2) Average number of students in attendance, 1905–1915 was 109
(3) Average number of students in attendance, 1916–1918 was 130

The large number of veterinarians required by the army is working a severe hardship on the live stock industry of the state and nation. There are numerous requests for veterinarians which cannot be supplied. Although the Government is trying to prevent all practitioners in a given locality from going into the army, it nevertheless is true that many important dairy districts are at present without veterinary service. The shortage of grain has caused many heretofore untried "cattle feeds" to be placed on the market some of which have caused a great amount of digestive troubles with considerable loss. This has created a larger demand than usual for veterinary service.

The teaching facilities of the college have been improved in a number of ways. Additions have been made to the teaching collections, charts and other demonstration matter. Certain special apparatus, however, could not be secured; and for this reason, the legislature reappropriated the balance of the special appropriation made for the purchase of equipment. The clinics have grown until material is now ample for the satisfactory teaching of practical medicine and surgery. Last year there were treated in these clinics a total of 3,937 cases. They represented a very large part of the diseases of food producing animals which occur in this latitude. The expectations of the teaching value of the ambulatory clinic have been more than realized. This clinic has demonstrated the economic significance of prompt and efficient veterinary service and confirmed the opinion of many practitioners that early attention and a careful watching of the cases will restore to usefulness many animals that otherwise would be lost. This suggests the important part veterinarians are to take in the conservation of the live stock of the country. A corollary to this is found in the statement made under date of April 9 in the Crop and Live Stock Report of New York State by the U. S. Department of Agriculture that "During the year ending March 31, 1918, the losses from disease among the horses, cattle, sheep, and swine on the farms of this state (New York) were in every case below the average." This is a direct result of an improved veterinary service.

The work in diagnosis and in the preparation of diagnostic biologic products for the Commissioner of Agriculture and for the veterinarians and live stock owners of the state has been more extensive than heretofore. This is especially true of diagnostic agents such as anthrax vaccine, tuberculin, and anti-hog-cholera serum. The total examinations for the present year cannot be determined at this time but during the fiscal year ending June 30, 1917, 70 examinations were made for the diagnosis of anthrax, 166 for glanders, 41 for mastitis, 404 for various diseases of poultry, 190 for rabies, 182 for tuberculosis and 308 for miscellaneous disorders. In addition, there were made and sent to the Commissioner of Agriculture and the veterinarians of the state 18,101 doses of anthrax vaccine, 673 doses of mallein, 79,061 doses of tuberculin, and 12,718 doses or 254,360 c.c. of anti-hog-cholera serum.

As a result of these examinations, we are collecting valuable data on the localities in the state where destructive infectious diseases of animals exist. The veterinarians in these communities are notified of the possible reappearance of these maladies. With this information the practitioners are on the watch for them with the result that the spread of such diseases is promptly checked. A quick diagnosis and the immediate application of preventive measures is of inestimable value to the live stock industry of the state.

The research work has continued as heretofore, but, for reasons stated, it has been more restricted. The barn and paddocks for the special study of the diseases of breeding cattle have been completed and that work is now progressing. The study of the spread of hog cholera has continued. The report of the college, made to the Governor in January, contained an important contribution by Dr. Birch on the methods of preventing disease among garbage fed swine. In the surgical department, Dr. Frost has brought out valuable new operations for the treatment of certain troublesome diseases in dairy cattle by which he has been able to save a number of valuable animals. The publication of these methods will extend their usefulness. Important researches have been made and published from other departments.

The resignation of Dr. C. P. Fitch to accept a position as head of the veterinary department of the University of Minnesota unfortunately brought to an end, for the time being, valuable researches in connection with infectious anemia in horses which is quite prevalent in certain areas in the state and also investigations on the parasites of sheep. The college has cooperated with the officers of the State Agricultural Society relative to the reestablishment of the sheep industry. As one of the obstacles to the successful raising of sheep is the loss from parasites, special attention has been given to that subject not only with students but also with the practitioners of the state.

The regular work of the college has been affected by the war as mentioned above. The college has done, moreover, all that it could to assist the Government in its gigantic task. It did not seem wise to undertake any special investigations under the heading of war work. Both the teaching and research in which the college is engaged are of much importance at all times in the preservation of animal life, and in a period of war the results of such work are of infinitely greater significance. It was felt, therefore, that it would be most advisable to give even more attention than before to the researches in hand which would tend to a greater conservation of food producing animals. As there was never before a time when this country needed meat and animal fats for food, and wool and leather for clothing more than now, it was the belief of the faculty that the most helpful thing it could do was to intensify and increase, as far as possible, the usual operations of the college. This the faculty has done to its utmost ability.

In rendering service to the country, the faculty, students, and alumni have responded willingly. Last spring when the call came from the agricultural interests of the state for labor to put in crops, 93 of our students responded to that call and took their places as laborers on the farms. Their employers certified to their employment and efficiency. Practically all of the students in the lower classes returned in the fall with the exception of 19 who were taken by the draft. Some of these have since been discharged in order to enlist in the Enlisted Medical Reserve Corps and have returned to complete their course. Of the 32 graduates, 15 passed the examination for veterinarians in the regular army and most of the others entered the Veterinary Officers' Reserve. These men had intended to go into practice but the declaration of war caused a change in their plans.

The dean of the college was occupied for the greater part of the summer of 1917 in giving examinations for the Veterinary Officers' Reserve and in serving on an advisory board in the Surgeon General's Office for the purpose of organizing

the Veterinary Corps of the National Army. Phases of this work have continued throughout the year and occupied a considerable part of his time. In February, Dr. Udall, professor of medicine, was commissioned as Major in the Veterinary Corps and Dr. Muldoon, assistant professor of materia medica, also accepted a commission. Of the alumni, 68, or 16 per cent, are now in active service and about 50 others are commissioned and waiting to be assigned.

Because of the uncertain conditions on account of the war, it is too early to make specific recommendations regarding appropriations for 1919–1920. The necessity for more intense study in connection with certain destructive diseases of animals led us to request the legislature to increase our facilities in that direction. This was granted. If the student body is small, it is more than likely that additional research work will be taken up and further appropriations for that purpose requested.

In carrying out the requirements of the law covering the activities of this college, the members of the faculty have worked unitedly to the end that the college should meet the needs of the veterinarians and the live stock owners of the state and also fulfill its obligations to the students.

Respectfully submitted,

V. A. Moore,

Dean of the New York State Veterinary College.

APPENDIX VIII

REPORT OF THE DEAN OF THE NEW YORK STATE COLLEGE OF AGRICULTURE

To the President of the University:

Sir: I have the honor to submit herewith a report of the work of the New York State College of Agriculture for the year 1917–1918.

LEGISLATIVE APPROPRIATIONS

The generous appropriations by the Legislature in 1917, while inadequate to meet many greatly needed developments in the College, were nevertheless sufficient to maintain the College during this year of excessive costs, and we shall be able to close the year within our available funds. The 1918 Legislature, whose sessions were recently brought to an end, has also made substantial provision for the maintenance of the College.

Among the more important additions made by the 1918 Legislature are provisions for the following: A new professor in Vegetable Gardening; a professor and an assistant professor in Rural Engineering; three assistant professors in Home Economics; two professors in Rural Education to meet the obligations of the Smith-Hughes work; two assistant state leaders in the Home Demonstration work. An appropriation of $7500 was made for the erection of an insectary,

or laboratory for economic investigations of insects, and one of $2000 for the underdrainage of the plant-breeding and floricultural experimental grounds.

In this connection attention is called to the fact that the Legislature this year transferred the farmers' institute work, hitherto conducted by the State Department of Agriculture, to the State College of Agriculture as part of its extension service. It has long been recognized that this transfer should be made, as the institutes are a form of educational extension—a function which has been vested by law in the College. The State Department of Agriculture, or the Department of Farms and Markets as it has now been named, is more strictly a regulatory department, charged with the administration of the agricultural law.

Two financial problems of first importance to the welfare of the College still confront us: the urgent necessity for additional buildings to house some of the departments; and the insistent need for salary increases for members of the staff.

The college buildings have been very greatly overcrowded for a number of years and the congestion grows constantly worse. The Departments of Plant Pathology, Botany, Pomology, Floriculture, Entomology, Rural Engineering, and Rural Economy are crowded into only a fraction of the space needed for their present work, and the conditions are dispiriting to the men. Certain other departments are but little better off. The excessive costs of building during the war period and the need of skilled labor for war work have dictated that we should not seek appropriations from the State for these purposes at the present time. It is part of our public obligation to get along as best we can with present facilities until the war ends. Thereafter we shall need as soon as possible to seek funds for the erection of additional buildings.

The situation in respect to salaries is even more acute. Because of the serious financial burdens confronting the State the Trustees felt that this year increases in salaries for members of the teaching staff should not be requested. We find, however, that under the impetus of the nation-wide movement for increased food production, very large appropriations have been made for agricultural purposes in most if not all of the States; and the United States Department of Agriculture has received vast war funds from Congress. On every hand new lines of war work are being developed and old lines extended. The inevitable result is an overwhelming demand for trained men. Many very valuable young teachers have already gone from us, and a number of our full professors have received financially alluring invitations to go elsewhere. A large part of the staff have received no increases in salary for several years—a condition that is made the more acute because of the rapidly increased costs of living during this period. It would be opposed to the interests of the State to allow our staff to be depleted of its most able teachers.

Since its creation as a state institution the College of Agriculture, by reason of its being charged with the field of extension teaching, has been looked upon as the chief agency in the State to give immediate assistance to farmers in their practical problems of crop production. This obligation has grown with the years, and it has been multiplied under the stress of war. Unless we can retain against the bidding of other states and the United States Department of Agriculture the men needed for the war-time extension activities of the College, we shall fail in what the State has a right to expect of us just at the period when the severest test is being made of our ability to serve farmers.

TEACHERS IN THE MILITARY FORCES OF THE COUNTRY

Fourteen members of the teaching staff of the College have joined the military forces of the country either by enlistment or under the draft. Acting Professor Paul Work, Superintendent of our Department of Vegetable Gardening, is a Second Lieutenant with the 304th Engineers at Camp Meade, Md. Assistant Professor Leonard A. Maynard, of the Department of Animal Husbandry, is in the Gas Service of the Sanitary Corps. Assistant Professor Edward R. King, of the Department of Entomology, is in the Aviation Service. The following instructors have gone: Edwin S. Ham, Harry E. Knowlton, Harry H. Knight, Louis A. Zimm, Edwin F. Hopkins, L. J. Norton, George R. Phipps, Howard J. Ludington, Cedric H. Guise, Harold D. Phillips, E. W. Lindstrom.

In addition to the above, Lewis Knudson, Professor of Botany, was granted leave of absence for Y. M. C. A. war service in France. A number of members of the staff have been granted leaves of absence for special governmental service in the field of agriculture.

PROGRESS IN RESEARCH

The members of the research staff of the College and Experiment Station have continued their investigations with undiminished zeal. Many of these researches are of long duration, and the more important of these have been mentioned in earlier reports. An adequate report of the progress in research during the year would necessitate reviewing many of the long-established research projects, and the limits of space forbid this. The separately printed annual report of the College and Experiment Station will deal more fully with the progress of research. Suffice it to say here that the conditions created by the great war only confirm our conviction as to the high importance to the State and Nation of the kind of investigations now under way; and that in the interest of the country they must be safeguarded to the fullest possible extent from the encroachments of war. The food situation created by the war has revealed more clearly than ever to our state and national leaders the fundamental dependence of the people on the results of agricultural researches. The future should see larger public support given to such work.

THE INVESTIGATION OF BEAN PRODUCTION

Pursuant to legislative enactment, Section 306, Laws of 1917, the New York State College of Agriculture at Cornell University has undertaken the commission of making an "investigation of the bean production in the State, including the ravages of diseases and insect pests, the breeding of disease-resistant or improved varieties, and of such other matters in relation thereto as such college of agriculture may determine."

For the purpose of the investigation, experts in entomology, plant breeding, and plant pathology have been employed and all necessary facilities and accumulated information at the College placed at their disposal. During the summer months the investigations have been conducted at a temporary field laboratory located in a bean field at Perry, New York. Records and observations have been made in all the important bean-producing sections of Western New York. Considering the very unfavorable season for bean production, the experts have made notable progress in their work. There has been the closest possible cooperation

in all the work, and the whole project has been pushed forward with the idea of finding methods of improving the conditions for producing beans. A detailed report of the progress of this investigation is given in the separately printed annual report of the College.

The work thus far done only serves to emphasize the great necessity for further investigation. Bean growers are discouraged with the low yields they have been getting and many of them have stated that they cannot continue in the business unless relief comes soon. It has been found that the important problems are not of easy or quick solution. The apparent methods of attack of these problems require long and persistent effort, and this is being consistently applied. In the case of remedial treatments, the results of a single season cannot be used as a basis for reliable recommendations; and in the case of breeding, several generations of plants must be secured before it can be determined that types have been fixed.

DEPARTMENTAL NOTES

Botany.—Heretofore the introductory course in botany, course 1, was an alternate requirement with Zoology 1, in the sophomore year. By action of the faculty it was this year made a requirement for all students and placed in the freshman year.

The Department of Botany has for some years devoted special attention to the acquirement of teaching materials. During the current year the departmental herbarium has made substantial growth. The accessions include, among numerous smaller collections, a set of Newfoundland plants collected by Messrs. Fernald and Wiegand in 1910–1911 and donated by the Gray Herbarium (2400 sheets); a set of Northern New York State plants collected by Mrs. Orra P. Phelps, received from the Gray Herbarium in exchange (1450 sheets); a set of plants from Wellesley, Massachusetts, collected by Professor Wiegand and donated by Wellesley College (400 sheets); a set of rare plants sent out by the Gray Herbarium (200 sheets); plants collected in 1917 in New Jersey, on Staten Island, and on Long Island, by a member of our staff, Mr. A. Gershoy (1000 sheets); and local specimens collected about Ithaca by members of our staff in 1917 (1800 sheets)— making a total of more than 7000 sheets added to the herbarium during the year.

Dairy Industry.—For a number of years the Department of Dairy Industry has handled large quantities of dairy products in order to have these materials for laboratory instruction purposes. Last summer, because of the war situation and the unusual conditions that developed in the dairy industry, it became impossible for the Department to compete with milk shipping stations and milk condensaries and manufacture its milk into butter and cheese. Since the Department had no equipment for making condensed or powdered milk, it was obliged to turn over its milk supply to the Ithaca Condensary. While the Department has handled small quantities of products during the year in connection with its teaching work, its teaching has been handicapped because of the loss of this work. It is hoped that these conditions are temporary.

Last summer the Federal Government called on all the men of this Department, except the head, to do special emergency work or inspect navy butter. The Government has already called on the entire staff of this Department for

similar work during the coming summer. It is of interest to note that for the past several years the Government has drawn more than fifty per cent of its navy butter inspectors from our own Dairy Department.

Entomology.—It has been necessary temporarily to discontinue the instruction in apiculture because of the entrance of Assistant Professor King into the Aviation Service. During the year Professor E. C. Van Dyke, of the University of California, held appointment in the Department of Entomology as an Exchange Professor, Professor J. C. Bradley, of our own Department, having been granted leave of absence to accept appointment to take Professor Van Dyke's work in the University of California.

Farm and Vegetable Crops.—The work in vegetable gardening, both teaching and extension, suffered a severe blow with the drafting for military service of Acting Professor Work, Superintendent of the Department. It seemed best, in order to take care of the work in vegetable gardening, to unite for the period of the war the Departments of Vegetable Gardening and Farm Crops under E. G. Mongtomery, Professor of Farm Crops. This consolidation was accomplished last fall, and it gives every promise of being a happy arrangement.

Floriculture.—During the year the Department of Floriculture has received the donation of a valuable collection of exotics from the estate of Charles Seymour Husted, of Broadalbin and Brooklyn, New York. This collection will be of much value in furnishing illustrative material for teaching purposes, especially in courses in conservatory plants.

Forestry.—In the autumn of 1917 Professors Spring and Bentley, of the Department of Forestry, during their vacation period from Cornell taught in the Yale School of Forestry. Professor Ralph S. Bryant, of Yale, taught at Cornell during the preceding summer term. This exchange of professors between two leading American schools of forestry is significant as being indicative of close correlation of work and interest.

STAFF APPOINTMENTS

On October 1, 1917, Bernard A. Chandler was appointed Acting Assistant Professor of Forest Utilization for the period of the college year. During the year Professor Chandler has been engaged in forest investigation work, mainly in the Adirondacks.

Extension activities in the Department of Animal Husbandry have been materially strengthened by the appointment of Mark J. Smith, a sheep specialist, as an Assistant Extension Professor.

For the first time definite provision has been made in the Department of Rural Economy for the much-needed development of extension work, by the appointment as Extension Professor of Rural Economy of Mr. James E. Boyle, at present of the staff of the Bureau of Markets of the United States Department of Agriculture, and earlier of the North Dakota Agricultural College and the University of North Dakota. He will take up his work at the beginning of the next college year.

The enlargement of our facilities for the training of teachers, involving several appointments to the staff, is separately treated in the following paragraphs.

THE TRAINING OF TEACHERS OF VOCATIONAL AGRICULTURE AND HOME MAKING

On February 23, 1917, President Wilson signed the Smith-Hughes Act. Among the features of this law is a provision for granting to the States, under certain stipulations, federal funds to be used in the preparation of vocational teachers of agriculture, home economics, and trades and industries. The allotment to New York State for the year beginning July 1, 1917, was $49,714. Provision is made by which in four years time this amount will be doubled. The State must provide an equal amount, so that for the year 1920–1921 there will be available from state and national sources a minimum of approximately $200,000 for these purposes in New York State. Within the State this act is administered by the State Department of Education, and this authority has designated the New York State College of Agriculture at Cornell University as the institution for the training of teachers of agriculture and as one of the two institutions to prepare teachers of home economics under the provisions of this legislation.

Partly under the impetus provided by this act, four new members have been added to the staff of our Department of Rural Education. Professor William F. Lusk, Ph.B., M.S., came to us after several years of experience in the University of Minnesota. Assistant Professor Paul J. Kruse completed the requirements for his doctorate at Columbia University just before coming to the Department, but he had been for some time previously a member of the staff of the College of Education in the State University of Washington. Professor Rolland M. Stewart, previous to coming to Cornell, was assistant professor in the University of Iowa for six years; he had completed the requirements for the doctor's degree at Iowa. Professor William S. Taylor came from the University of Texas, where for five years he was Associate Professor of Agricultural Education. He had been in our Department for only a few weeks when Pennsylvania State College offered him a position as head of the Department of Rural Education. This position Professor Taylor accepted, and he left on April 1 to take up his duties in Pennsylvania.

It has been necessary to provide a course in farm shop work in the Department of Rural Engineering, for the conduct of which Mr. L. M. Roehl was appointed; and similarly a shop course in Home Economics, with Miss M. G. Ingersoll in charge.

In cooperation with the local school authorities a demonstration department of vocational agriculture has been established at Trumansburg. Plans are under way to extend this feature to cover home making next year.

SUMMER SCHOOL

Previous to the opening of the summer school in 1917 the requirements for admission were raised. Provision was made by which those persons engaged in educational work were admitted regardless of previous academic preparation; others were required to have completed at least two years of work in Cornell University or some other institution of equal standing. These changes were made in order that this session of the College might serve in a larger measure the needs of teachers, supervisors, and superintendents. In spite of the increased requirements and the effect of the war, the attendance increased from 382 in 1916 to 405 in 1917.

THE STATE GAME FARM

By act of the New York State Legislature, Chapter 747, Laws of 1917, there was established a New York State Game Farm as part of the State College of Agriculture, to be administered by the Trustees of Cornell University. Under authority of this act a tract of 176 acres, adjacent to the college farm on the east, has been purchased.

Recognizing that we are at the beginning of knowledge of our plant and animal resources, this new educational enterprise takes for its scope the wild life of New York State and the conservation of all that is valuable in it. Beginning with the rearing of game birds and waterfowl, to replace in some measure these rapidly vanishing wild groups, it is expected that this work will be extended to the conservation and care of fur-bearing animals, of valuable song birds, of wild flowers and useful native shrubbery, and of every wild thing that gives promise of being used for the material or educational betterment of the people. All life was once wild life. Agriculture has grown by selection and care of the best that nature offers. This work is initiated in the firm belief that the sources of our benefits in nature are by no means exhausted.

The object of the game farm is to afford opportunity for instruction in game breeding and the conservation of wild life. Breeding of ring-necked pheasants and mallard ducks will be conducted during the first season of its operation, and in succeeding years the work will be enlarged to include other species of useful game birds, fishes, and other animals. Emphasis will be given to the correlation of game breeding and different types of farming in New York State. Progress is being made already in stocking and equipping the farm for teaching and research.

Instruction in wild life conservation and in game breeding is offered in the following courses:

1. The regular four-year course in agriculture, in which students may include among their elections the subjects that are fundamental to wild life conservation and game breeding.

2. A short course of twelve weeks (to be followed by one or more seasons of work on a game farm) to give practical training in the technique of game breeding.

3. A series of public lectures given by experts in the various lines of wild life conservation.

During the second term of the current year a series of thirty-one lectures on various phases of wild life has been given by nineteen lecturers, men eminent as authorities in the field. This series was made possible by the generous co-operation and assistance of the lecturers, who gave their services, and of Mr. Frederick C. Wolcott, who provided money for the payment of traveling expenses.

REPORT OF EXTENSION SERVICE

The administration of extension work was in a measure reorganized on July 1, 1917. The former Department of Extension Teaching, the Office of Publication, the Central Office of County Farm Bureaus, and the newly created Central Office of the County Home Demonstration Agents, were combined to form the Extension Service under the immediate headship of Professor M. C. Burritt, who was made Vice-Director of Extension, the Dean of the College being the

Director of Extension. This organization is administrative and functions as a branch of the Dean's office.

The Dean and the Vice-Director, M. C. Burritt, continued to serve as members of the New York State Food Supply Commission until October 18. Other members of the staff also devoted several months to the work of the Commission. On November 1 Professor H. E. Babcock was given leave of absence to assist President Schurman in the work of the new State Food Commission.

It was thought expedient to reduce the number of one-week extension schools this winter. Twenty-nine were held in twenty counties, with a total enrolled membership of 1004, an average of 34.6. These figures do not include visitors and high school students who attended irregularly. There were also held at the College, under the supervision of the Department of Rural Engineering, two special tractor schools, each of three weeks duration, for the training of operators. The first of these had an enrollment of 40, the second 37. In addition twenty tractor schools of one week each in length were held in nineteen counties in cooperation with the State Food Commission. These had a total enrollment of 1200, or an average of 60 a school.

Exhibits were sent to the State Fair, the Rochester Industrial Exposition, six county fairs, the meeting of the New York State Fruit Growers' Association, the meeting of the Western New York Horticultural Society, and the Milk and Dairy Farms Exposition held in Grand Central Palace, New York City.

The Eleventh Annual Farmers' Week had a registered attendance of 3095 for the week. Special prominence was given on the program to subjects relating to food production and conservation.

A demonstration car for instruction in grading and storage of potatoes was run over the lines of the Lehigh Valley Railroad in seven counties, making 28 stops with an attendance of about 400.

The available reading-course lessons have been classified, and bound sets have been prepared for the use of county farm bureau offices, granges, and other institutions and individuals. An effort has been made to increase the use of the reading course through closer cooperation with the county agents. Ten thousand new names have been added since July 1, 1917. At the close of the year the total number of readers will probably exceed 31,000.

Shortly after this country entered the war and renewed emphasis began to be placed on increased food production, there came a great demand from school authorities for assistance in the development of school and home gardening. Fortunately, Congress made funds available through an emergency appropriation, which has made possible a marked development of the Junior Extension under Professor F. L. Griffin, State Leader of Junior Extension Work.

OFFICE OF PUBLICATION

The issuing of publications has been better systematized. The war has made new and unprecedented demands for emergency publications bearing on the problems of food production and food conservation. A great number of these, mainly of the "how-to-do-it" type, have been published on short notice. Strictly of this type of publication, forty mailing cards have been issued with a total number of eighty pages and with a gross issue of 3,155,000 copies. Practically all of these have been distributed.

Exclusive of the mailing cards the following publications have been issued:

	Total number	Total pages	Printed copies
Experiment station bulletins	9	404	33,000
Memoirs	1	276	4,000
Reading-course lessons for the farm	9	268	335,000
Reading-course lessons for the farm home	5	124	675,000
Extension bulletins	15	268	330,500
Rural school leaflets	3	428	260,000
Miscellaneous	4	88	24,000
Annual report (in two volumes)	1	3,240	2,000
Announcements	2	96	16,000
	49	5,192	1,679,500

During the past year the information service has conducted campaigns on wheat-saving menus, for greater milk consumption, for larger use of potatoes, and for home gardening and food preservation. A record of actual printings of its items as seen by the College shows that these reached the amazing total of 43,000,000 printings. Items seen by the College undoubtedly represent only a comparatively small proportion of the total.

OFFICE OF THE STATE LEADER OF COUNTY AGENTS

War emergency conditions brought upon the farm bureau organization new obligations and a vast amount of detail, much of it government work requiring immediate and careful attention. The bureaus provided the machinery through which the various federal, state, and other public agencies chiefly made contact with farmers. They provided at once county clearing houses for governmental projects such as the census, seed exchange, supply of labor, and organs for responsible expression of their needs by farmers.

Fifty-four counties out of fifty-six have active organizations. The new bureaus have come in with large memberships, and the percentage of total farmers in the State belonging to the farm bureau associations steadily increased from 9.5 in 1916 to 15.8 in 1917.

Locally the bureaus have reorganized to the extent of changing from a township to a community unit organization. In each community at least one man is designated as a farm bureau committeeman. In the fifty-four counties there are approximately 2103 designated agricultural communities, with a total of 6936 appointed community committeemen.

Of particular interest is the appointment of a special agent, himself a Jew, to work among the non-English-speaking Jewish farmers, of whom there are large numbers in the State. This is the first definite provision to meet the needs of foreign-language farmers in this State.

OFFICE OF THE STATE LEADER OF HOME DEMONSTRATION AGENTS

Up to July 1, 1917, five counties had been organized with home demonstration agents. During the spring and summer, through cooperation with the New York State Food Supply Commission and the Federal Department of Agriculture, temporary agents were placed in thirty-six additional counties. In each case certain local requirements were made as follows:

1. An executive committee of local women to direct the work.
2. A financial contribution of at least $300.
3. Office space and adequate equipment.

On December 1 the work was reorganized, the State Food Commission taking supervision of the city work and the College taking the county or rural work. Steps were at once taken to put the county work on a more permanent basis, and adequate expression of desire for a continuation of the work on the part of county women was first obtained, after which a representative and responsible executive committee was elected, and community committees were appointed through which the agent could perfect and prosecute plans. The officers of the community committees form an advisory council which meets at least once a year to report and devise plans for the coming year.

By April, 1918, twenty-eight counties had organized according to the plan outlined, with the five original organizations making a total of thirty-three.

The chief lines of effort on the part of these agents have been: (1) demonstrations in food preservation; (2) demonstrations in the making of "Liberty Breads", the use of sugarless recipes, and the use of potatoes; and (3) a campaign to increase the use of milk. During the period from July, 1917, to April, 1918, a total of 1917 demonstrations was held, with a total attendance of 76,890. In addition there were 1500 lecture meetings with a total attendance of 94,231, and there were 1472 personal visits.

As a result of these activities a number of communities have cooperated in the purchase of pressure canners. It is estimated that home canning was increased 300 per cent, due in some measure to the efforts of the agents. Community canning kitchens have been developed in several counties; in Nassau County there are nine such kitchens. At one of these kitchens 16,000 cans of vegetables were put up during the season. Much of the material preserved was surplus that might otherwise have been wasted.

DEPARTMENTAL EXTENSION ACTIVITIES

Entomology.—Throughout last summer the Department of Entomology, cooperating with the New York State Food Supply Commission, conducted an insect control service with a small number of special local agents.

Farm Crops.—In the past two years the Department of Farm Crops has conducted more than 3000 crop projects of various kinds. The crop demonstration work throughout the State is carried on through the farm bureaus. The rapid increase in the number of farm bureaus conducting these projects has created an unusual demand for expert supervisory help from this Department.

Marked progress has been made in the work of seed certification. The Department has assisted in organizing the Suffolk County Seed Association, which handled 15,000 bushels of certified seed corn for 1918. Working in cooperation with the New York State Potato Association, the Department inspected 76,000 bushels of seed potatoes for disease and varietal purity. A seed survey of the State was carried on through the agency of the farm bureaus in December. Germination tests of seed corn from all parts of the State except the southeastern counties showed poor viability. Publicity was given to sources of good seed through correspondence, the press, and printed circulars.

In cooperation with the office of Junior Extension work, the Department of Farm Crops has aided largely throughout the State in the promotion of the home and school garden movement in cities and villages. During the spring two specialists were constantly engaged in the field in this work.

Farm Management.—The Department of Farm Management tabulated the state census of agriculture taken by the Food Commission in 1917 and again in 1918. Many other states are this year taking a more or less complete census of agriculture by similar methods. In addition the Department has collected and tabulated data on the cost of producing milk for the Federal Food Administration, and has furnished information on costs of production and other statistics called for by the various authorities on food and agriculture.

Forestry.—Since January 1, Assistant Professor Collingwood, and for a time Acting Assistant Professor Chandler, of the Department of Forestry, have devoted time to the wood fuel campaign, in cooperation with the State Advisory Committee appointed by the State Conservation Commission, to work in conjunction with the State and County Fuel Administrators. The establishment of municipal wood yards and the increased use of wood as a substitute for coal were urged.

Plant Pathology.—The extension work of the Department of Plant Pathology, which has consisted of the regular extension work conducted under Smith-Lever projects, and the emergency work conducted for the New York State Food Supply Commission during the period from May 1 to September 30, 1917, has been directed toward carrying out the following projects: control of potato diseases; control of fruit diseases; control of cereal smuts; control of diseases of other crops; plant-disease survey; exhibits; extension schools and farmers' institutes.

Potato-disease-control demonstrations in special potato cars or at farm bureau meetings were held in seventy-eight localities, representing thirteen counties. Under the Food Supply Commission, inspection of potato fields was made by two inspectors in thirteen counties in order to secure good seed for 1918, and as a result 923 acres good enough to pass two inspections were located and listed. Seven county field assistants were placed in eight counties; with the result that over 5100 acres of potatoes were sprayed more properly than could have been done without this service.

Fourteen demonstrations in the control of fruit diseases were held in seven counties. Nine counties had field assistants receiving supervision from this Department. Five of these assistants were employed on funds of the State Food Supply Commission and the remaining four on various other funds. Eleven of the important fruit counties received some assistance from this Department.

Twenty-nine oat-smut-control demonstrations were held in five counties, and two counties had the service of two federal demonstrators working in cooperation with the College of Agriculture, by whom twenty-five demonstrations for the control of wheat smut were given.

Fifty-two persons, from forty-five counties of the State, reported plant-disease conditions in their counties or communities to the Department, where results were tabulated and the information was made available. By means of this survey the Department was able to determine the earliest appearance, distribution, and severity of the various plant diseases, and to direct its control

work accordingly. This work was done in cooperation with the Plant Disease Survey of the United States Department of Agriculture.

Poultry Husbandry.—The summary of the extension activities of the Department of Poultry Husbandry shows that 350 engagements were filled at meetings attended by 18,989 persons. Particular stress was placed on selection of stock in an attempt to save the poultry industry. This selection campaign, it is estimated, resulted in discarding over 300,000 unprofitable fowls, thus saving not less than 936 tons of feed (amounting to $56,160), which was thus released for profitable production purposes.

Soil Technology.—Soil surveys of Saratoga County and Oswego County, having an aggregate area of 1799 square miles, were made by the Department of Soil Technology in the field season of 1917. These are the twenty-fifth and twenty-sixth areas surveyed. The total area now covered by surveys is 17,113 square miles. The reports on the above-mentioned counties will be the eighth and the ninth published by this College, the earlier reports having been published only by the United States Department of Agriculture, with which the College cooperates in the conduct of soil surveys. As a result of these twenty-six surveys, coupled with supplementary investigations, we now have a fairly accurate knowledge of soil conditions in all sections of the State.

Of the field demonstrations conducted by the Department, the drainage work is now the most active and shows the cumulative effect of the attention that has been given to that subject over a period of several years. The most significant development is the introduction of the engine-power trenching machines that are being provided by the State Food Commission. Three machines were purchased by the New York State Food Supply Commission in 1917 and were set to work in the counties of Tompkins, Ontario, and Orleans, beginning work on September 1 and closing the season on December 6. They were operated under the general administrative direction of the farm bureau in each county, working in cooperation with this Department and with the Department of Rural Engineering of the College. The success of the first three machines led the present State Food Commission to order ten additional machines to be installed early in the present season. A conservative estimate of the number of rods of trench that such a machine may construct in a field season is 8000. On this basis the thirteen state-operated machines should construct about 300 miles of drainage trench in a season. Results indicate that the increase in crops will be from 50 to 75 per cent over a large part of the area so drained; in many cases it will make the difference between no crop and a good crop. Consequently this work makes possible a large addition to the food-producing area of the State, and it comes with such promptness and surety as to contribute to the current season's supply of food.

FOOD CONSERVATION AND THE DEPARTMENT OF HOME ECONOMICS

Throughout the year members of the Department of Home Economics have worked untiringly in the interests of food conservation in the State and the Nation. Last summer Professors Van Rensselaer and Rose, together with Miss Freer, the State Home Demonstration Agent, were immediately responsible for the organization and supervision of the emergency food conservation in the State, cooperatively maintained by the New York State Food Supply Commission and the United States Department of Agriculture through the Extension Service

of the State College of Agriculture. Various members of the Department have given considerable time in furthering the national program for food conservation. On request of the Food Administrator, Mr. Hoover, Professor Van Rensselaer was granted by the Trustees a six-months leave of absence, beginning March 1, to take the position of Director of the Home Conservation Division of the United States Food Administration.

Cafeteria.—To serve only such food as is consistent with the ruling of the Food Administration has required much experimental work in cooking large quantities. By observing wheatless and meatless days and by reducing the amount of sugar and fat used, the cafeteria has been able to save each month about 1800 pounds of wheat flour, 1000 pounds of meat, 900 pounds of sugar, and 500 pounds of fat.

Extension.—The extension staff of the Department has been engaged in organizing and carrying forward the state campaign for food conservation. In all, 189 extension meetings have been held and about 26,000 persons reached. These meetings have included demonstrations; meetings with study clubs, Red Cross, women's clubs, teachers' associations, granges; community singing; community-center work; county organization; campaign meetings; and the like. Seven extension schools in foods have been held in counties where there has been no county home demonstration agent.

Junior Extension.—Two instructors, working in cooperation with the Office of Junior Extension in the Department of Rural Education, have carried out projects in food and clothing during the year. Twenty-four new circulars presenting the subject matter have been written, and certain old ones have been revised to fit the war work. In the clothing project the children were given regents credit for making garments to be distributed by the Red Cross and the Franco-American Committee for the Protection of the Children of the Frontier. The work in food has been adapted to follow conservation regulations. From September 15, 1917, to March 1, 1918, 148 field meetings were held with an attendance of 32,483 children. Ten fairs were visited, and the project work at the fairs was judged and prizes were awarded. The total registration in Junior Home Projects in foods and clothing on March 1, 1918, was 1453.

Reading Course.—The work of revising the Farm Home Reading Course mailing list, begun in October by sending out franked postal cards with a return card attached, is now practically completed. The old list, including club members, contained 82,605 names; the new list at present contains 61,596 names. In addition to this number of readers regularly receiving publications, 22,819 individual requests have been filled, of which 2453 were from outside the State.

Study Clubs.—Eighteen new Cornell study clubs have been added to the list during the year, making a total of 255, with an average membership of 25. The clubs have been of particular service in the food conservation work in their communities, because they formed an existing nucleus of community interest with which the county food conservation agents could work. Many home demonstration agents report that their strongest hold in the county has come through the Cornell study clubs. Twenty-one programs on food conservation, with references for study, have been prepared by the Department and sent to the clubs as guides for their meetings.

State Organization.—During the year the Department carried out, in cooperation with the New York State Food Supply Commission and its successor, the

New York State Food Commission, a state program on food conservation. From July 1 to November 1, thirty-six counties and seven cities, with a food conservation agent in each, were organized by the Department in cooperation with the Office of Home Demonstration Agents.

Emergency Schools.—During the summer, three emergency schools of from six to ten days each were held at the College, for the purpose of giving to candidates for positions as county food conservation agents some understanding of the problems and organization of extension work, as well as recent information as to subject matter.

Newspaper Service.—During the preserving season the food staffs contributed two or three daily recipes for canning, drying, or salting foods, which were sent to the newspapers of the State by the Department and the New York State Food Supply Commission. Since December the staff has contributed conservation menus for each day of the week.

The number of questions on foods coming in daily from all parts of the State has increased greatly since the emergency began. As a result, a food QUESTION BOX has been conducted in many of the state newspapers by the county food conservation agents.

Newspaper articles bearing on various phases of the emergency food problem have been issued; for example, during the canning season one regular feature, *A CAN A DAY*, went to the papers of the State for daily use.

As part of the work on conservation of fats, an exhibit showing ways of utilizing excess fat from meats was prepared and sent to the county food conservation agents.

Information Service.—Throughout the year it has been necessary to send subject matter on food conservation in mimeograph form to the county agents. This material has been prepared by the foods staff, edited, mimeographed, and mailed. Twenty such circulars on food conservation, and fifteen on conservation recipes, were issued; the total number of copies was 16,133.

Demonstration Cars.—For four weeks in July and August, two demonstration cars were run over the New York Central lines in cooperation with the New York Central Railroad and the New York State Food Supply Commission. Two members of the staff demonstrated the preservation of foods in season, exhibited equipment, and distributed printed matter. Twenty towns were visited, and in spite of the hot weather the average attendance was between 150 and 200.

Experimental Cookery.—The time of various members of the food staff has been required for experimental cookery as related to food conservation. The Department has been the experimental center from which subject matter of all sorts has been sent to the county food conservation agents in mimeographed form, as well as to the public through printed bulletins. Experiments have been made in canning vegetables with acid, preserving vegetables with salt and with salt and acid, canning fruits and vegetables, drying fruits and vegetables, and making pastes from fruits and vegetables. To encourage the drying of more fruits and vegetables, experimental work has been done on the cooking of dried products.

War Breads.—The bake shop has given the results of much of its experimental work to the United States Food Administration, and it has been used as a laboratory to test recipes for the Food Administration. Recipes for both large and

small quantities have been worked out. The head baker has demonstrated the making of war breads in Syracuse three times—at the State Fair, where over 3000 small loaves of war bread were baked and distributed; at a hotel where approximately 2500 persons were reached; and again before about 40 institution managers. In Troy he baked and exhibited bread for three days, reaching about 3000 persons. He has demonstrated the making of war breads for bakers in Washington at the request of the United States Food Administration. Over 5000 small loaves of war breads have been sent out to the Home Demonstration Agents for demonstration purposes.

Farmers' Week.—The keynote of demonstrations, lectures, and exhibits during Farmers' Week was conservation. Substitutes for wheat, sugar, and meat were emphasized; the remodeling of old clothing suggested possibilities of saving money and material; the fireless cooker was advocated as a fuel saver; and a conservation kitchen was illustrated by a full-sized model with all necessary equipment. Outside speakers discussed health conservation, the welfare of children, and the food supply in relation to world politics.

Exhibits.—The Department prepared an extensive exhibit for the New York State Food Supply Commission at the State Fair at Syracuse, and helped to stage a milk exhibit in the New York Central Station in New York City.

CONCLUSION

The foregoing pages give in brief an account of some of the interesting and significant activities of the New York State College of Agriculture during the year 1917–1918. The limits of space have forced the omission of many other important data which it would have been worth while to record and which will be more fully set forth in the separately printed annual report of the College. While fully realizing the necessity of maintaining the teaching and research with as little interruption of customary standards as possible, the College has been impelled during the first year of our participation in the war to emphasize the more immediately applicable phases of its work and expand its extension activities. Much has been accomplished, and yet only a fraction of the service which larger funds would have made possible. In a time when every agency, public and private, must be devoted unsparingly to the public good and the strengthening of the Nation, the State College of Agriculture is eager to have its staff and its facilities utilized to the utmost.

Respectfully submitted,

A. R. Mann,

Dean of the New York State College of Agriculture.

APPENDIX IX

REPORT OF THE DEAN OF THE COLLEGE OF ARCHITECTURE

To the President of the University:

SIR: I have the honor to submit my report for the College of Architecture for the academic year 1917–1918.

While attendance in the College of Architecture has fallen off proportionally more than in any other college of the University, the year's work has been far from discouraging.

An inquiry made on behalf of the Association of Collegiate Schools of Architecture into the registration in twelve of the foremost schools of architecture in the country to compare the registration of this year with that of a year ago shows the following conditions. The total registration in 1917–1918 was 846 as compared with 1498 in 1916–1917. The number of new students in 1917–1918 was 273 as compared with 468 in 1916–1917. The loss in registration varied in the different schools from 30 to 60 per cent and averaged about 43.5 per cent, while the decrease in the number of new students in all of the schools taken together was about 42 per cent. It is interesting to note, though conclusions may not be very obvious, that in five large eastern schools, Columbia, Cornell, Harvard, Massachusetts Institute of Technology, and Pennsylvania, there was a drop in registration from a total of 677 in 1916–1917 to a total of 324 in 1917–1918, a loss of 52.1 per cent, which is 8.6 per cent greater loss than the average for all of the schools investigated. Cornell's total registration in 1916–1917 was 168 and in 1917–1918 was 91, a loss of approximately 46 per cent. If this decrease in registration requires any special explanation it can probably be found in the fact that the war has practically stopped all ordinary building operations so that architecture is at a standstill, while there has been created an unprecedented and much advertised demand for men trained in the various branches of engineering, chemistry, and physics. The greater decrease in attendance at the older eastern schools may be due in some measure to their closer proximity to the seat of war and a consequent earlier awakening to its seriousness, and it may be due in part to the larger tuition fees which many prospective students must find increasingly difficult to meet in times like the present.

When war was declared last year the veritable stampede for enlistment seriously affected all but the freshman class and in particular almost depleted the ranks of the sophomore class.

The results this year have been that the senior and junior classes have been badly broken up and upper class standards have been hard to maintain. This has been particularly true of the junior class which now numbers less than a dozen members as prospective seniors for 1918–1919.

On the other hand, one of the most gratifying features of the situation has been the extraordinarily fine spirit shown by the entire body of students throughout the year. It has seemed to me that the students this year have been much more serious than usual, more conscious of their responsibilities, more sensitive

to suggestion, and more than ever ready to co-operate with the faculty to the full in all matters affecting the welfare of the college.

If circumstances have operated somewhat to lower standards in the upper classes, there has been compensation in the work and standards of the sophomore and freshmen classes. These classes have not only maintained standards, but have done unusually good work and have established new standards that will be hard for future classes to surpass even under the most favorable conditions.

The College has sorely missed the services of those staff members who have been commissioned in the national service; but they are for the time being in a much larger work and that in itself is a measure of compensation. In the meantime our work has been continued by a readjustment of teaching schedules and the temporary transfer of some subjects to the College of Civil Engineering.

Toward the end of the year, upon petition of the students and as a war measure, it was decided to give a third term during the summer months equivalent to a full term in the regular session of the University. The full time of the special term will be devoted to the teaching of design, and by a slight readjustment of fall term schedules those seniors taking the summer term may be graduated in February instead of in June of 1919. If the plan works out successfully and the war continues through another year a continuance of this general scheme of instruction would advance the time of graduation for other classes, thus hastening their preparation for national service.

If an answer is wanted to the question of what the college is doing to adapt its curriculum to special war needs, I can answer only that so far as the faculty has analyzed the situation the options in our regular curriculum offer all that we can perceive as pertinent in the special situation. Architecture as a profession has little or nothing to contribute to the destructive processes of war; but in the constructive processes, such as the planning and construction of cantonments, hospitals, housing developments, munition works, etc., and particularly in the after-war reconstruction, the architect is preeminently qualified for service. The government, and particularly the War Department has been slow to recognize this fitness, thinking of these projects from the constructive point of view and overlooking the value and significance of the planning and arrangement which are fundamentally architectural problems and problems requiring for their successful solution the best work of minds trained in the study and analysis of plan and composition. The light seems now to be breaking through and I venture to predict that the near future is to bring new recognition to the architect, and that his opportunities for valuable constructive service will be limited only by his training and his ability. It is for such service that this college is trying to fit its men and women.

Respectfully submitted,

CLARENCE A. MARTIN,
Dean of the College of Architecture.

APPENDIX X

REPORT OF THE DEAN OF THE COLLEGE OF CIVIL ENGINEERING

To the President of the University:

SIR: I have the honor to submit the following report for the College of Civil Engineering for the year 1917–1918.

The registration for the year as shown by the class roll calls has been as follows:

	First term	Second term
Graduates	4	6
Seniors	38	31
Juniors	46	46
Sophomores	60	62
Freshmen	68	60
Freshmen, five-year course	18	21
Special	0	0
	234	226

This includes four graduates the first term and six the second term in the undergraduate courses.

Instruction has also been given to students from other colleges as follows:

	First term	Second term
Arts	3	33
Agriculture	13	23
Architecture	16	47
Graduate School	4	6
Sibley	13	37
	49	146

The number of new students was 89, of which 86 entered the Freshman, four- or five-year courses, two the Sophomore and one the Junior classes.

The total registration was 234 for the first term, which is 167 less than for the corresponding period last year, while the registration for the second term is 226, or 142 less than a year ago.

This marked falling off in registration is to be credited to the war. By the end of the last school year, we had lost twenty-two juniors, twenty-seven sophomores and seventeen freshmen, who now would be seniors, juniors and sophomores respectively.

The demand for technically trained men, both graduates and undergraduates, has been excessive. We have been able to meet this demand only in a very small way because of its magnitude.

Our Honor Roll, however, gives the names of seven of the College faculty, three hundred and thirty-six of our graduates and twenty-seven of our undergraduates. A complete record when it can be obtained will undoubtedly show many more names to be added to this roll.

The regular work of the college in all departments has been carried forward as usual. In addition, the following war time courses have been provided and well attended.

A special three-hour course on Military Hygiene and Sanitation dealing with water supplies, disposal of camp wastes, personal hygiene of the soldier, and the prevention and control of communicable diseases.

A special three-hour course on civil engineering operations involved in modern warfare, dealing with location and construction of camps, roads, railroads, bridges, fortifications and other structures used for military purposes, and the transportation of men, munitions, and supplies.

A special three-hour course on navigation, dealing with definitions, instruments used, the compass and its errors, piloting, sailings, dead reckoning, nautical astronomy, practice of navigation at sea, winds, storms, tides and ocean currents.

A special three-hour course on advanced engineering drawing, dealing with plans for construction purposes, rapid sketching and mapping, and appropriate lettering for such drawings.

These courses were open to all students in the University whose previous training gave them the necessary prerequisites.

The college has also given four courses for the College of Architecture, namely: A two-hour course on the strength of materials, and a one-hour course on graphic statics, during the first term, and a two-hour course in mechanics, and a five-hour course in structural design during the second term.

While the College has lost approximately half its students, it has suffered a similar loss in its teaching staff. This latter has been so heavy during the present year that it was necessary to call upon several of our numbers for extra work, which met with a generous response.

The outlook for the coming year is problematical, but I see but one course to pursue and that is to be ready for any and every emergency. Our students of the present must have a full opportunity to complete their course and obtain their degree. To young men just leaving high school it can be said that no better opportunity ever presented itself for the young man with a technical education.

Respectfully submitted,

E. E. HASKELL,

Dean of the College of Civil Engineering.

APPENDIX XI

REPORT OF THE ACTING DEAN OF THE SIBLEY COLLEGE OF MECHANICAL ENGINEERING

To the President of Cornell University:

SIR: I would submit the following report on the work of Sibley College for the year 1917–1918.

ATTENDANCE

The war as you know has greatly affected all technical colleges in this country, Sibley College being no exception in this respect. The registration in the college during the first term of 1916–1917 was 926 but on the outbreak of hostilities many of the upperclassmen immediately entered the service of the country. The college opened in October, 1917, with 647 students and this registration has been reduced by withdrawals for war service and the failures at midyear to 539. How far this process of depletion may continue is difficult to forecast and men are leaving continually to enter Government activities.

The Government, appreciating the need of technically trained men, has adopted the policy of permitting technical students of draft age to remain in college and complete their work, provided they are in the upper third of their class scholastically, and provided they join the Enlisted Engineers' Reserve Corps. It is making somewhat similar provision for engineering students in connection with the Naval Reserve and has also made provision whereby enlisted students may be returned to college, provided their scholastic record entitles them to a place in the higher third of the class. A considerable number of students have taken advantage of these privileges so that we shall probably have some upperclassmen next year, but no doubt the junior and senior classes will be small.

THE FACULTY

The effect of the war on the faculty has been no less marked. At present five professors, three assistant professors, and seven instructors of the Sibley College Faculty are on leave of absence and are in governmental service of some kind. A number of others are working for commercial organizations that are doing important war work, while several that remain on the staff are carrying on work closely connected with the war. The withdrawal of members of the teaching staff for war work has kept pace, therefore, with the withdrawal of students.

The quality of instruction has been fully up to the standard of former years and the work of the college as a whole will compare favorably with that of any other period. There is grave danger, however, that the demands of the Government may take away many more of the teaching staff, so great is the need for technically trained men in all branches of war work. The industries that have been stimulated by the war are also offering great financial inducements that are very tempting to the younger men of the staff. Should the war continue we will, without doubt, experience very great difficulty in holding good teachers in the

college. This condition is universal throughout the country and a concerted effort is being made to induce the Government to provide some means whereby the teaching forces of the technical schools will not be reduced so far as to seriously endanger the quality of instruction. It is vital to the successful prosecution of the war to keep a constant stream of technically trained men flowing into the army and navy and the essential industries.

CHANGES IN CURRICULUM

Despite these losses from the teaching staff the most of the regular work of the college has been conducted as usual. One senior option in heat power engineering had to be discontinued because so many teachers were drawn from this department to build up the Government School of Aviation at Cornell; the courses in naval architecture were discontinued on account of the entire staff being taken by the Government; and a few elective courses were also discontinued. The loss of these courses has been somewhat compensated for by the special courses that have been offered with a view of assisting the Government as far as possible. The most important of these are the cooperative course for mechanical engineering seniors now in operation at the Wilmington shipbuilding plant of the Bethlehem Steel Corporation and the special course in radio engineering for men who wish to enter that branch of the aviation service.

The cooperative course at Wilmington consists of certain academic work which is given by Professor Matthews of Sibley College who is in charge of the course, lectures by officers of the Bethlehem Steel Company and members of the Sibley College Faculty with a considerable amount of actual practical work. The course is, primarily, a war measure but the Faculty hopes to obtain some experience with courses of this kind as, no doubt, educational methods will be changed somewhat by the war and technical education will necessarily be brought closer to actual industry. The entire group of mechanical engineering seniors, thirty in number, is taking this course.

The course in radio engineering was instituted at the direct request of the United States Signal Service. The content of the course was prescribed by the Government which also furnished some of the apparatus. About one-half of the work of the second term is filled up with this special work and seventeen seniors in electrical engineering are registered in the course.

A few seniors are taking the regular electrical option and a few are enrolled in the regular mechanical course, but practically the entire senior class is working on theoretical and practical work that will be of direct assistance in prosecuting the war.

The Board of Trustees has approved the plan of the Sibley College Faculty providing for a special summer term for the incoming senior class whereby these men can be graduated at midyear in 1919. All of the junior class have signified their intention of taking advantage of this opportunity and preparations are now under way to make the work of the senior year as useful as possible in the present crisis. The return of Professor McDermott makes possible the renewal of the courses in Naval Architecture and Marine Engineering. The special work in radio engineering will be continued and special work will be offered for those who may wish to qualify for work in the Quartermasters' Department. In addition to

these the regular courses in electrical engineering and mechanical engineering will be conducted. This will give every man a chance to fit himself for some particular branch of military work.

The demand for technically trained men of all kinds both by the Government and by the industries increases daily. The technical schools and colleges of the country have been requested recently to assist in training a large number of army mechanics for service in connection with the over-seas expedition. These army mechanics will be drafted men who may or may not have had experience of the kind desired and the plan is to give them short intensive courses in trade instruction similar to those employed in the ground schools for aviators. The shops and laboratories of Sibley College are well adapted to this work and arrangements have been made with the Government to send at least four hundred of these men here for the first instruction period of two months. We shall be asked in all probability to continue this work throughout the summer and succeeding winter.

RESEARCH

It has been very difficult, of course, to carry on much regular research work with the greatly reduced teaching staff, but a number of important investigations bearing upon the problems of the war are now under way in our laboratories. These include interesting experiments on sound, and on the possibilities of certain kinds of transportation equipment. The electrical and mechanical laboratories are also constantly making tests and investigations of commercial products built by private concerns for the Government. Obviously a detailed description of this work is not desirable at this time, but a record is being kept of these efforts for future historical reference.

THE FUTURE OF ENGINEERING EDUCATION

The future of Sibley College in common with that of all engineering colleges holds many difficult problems. It is too soon as yet to forecast just what effect the war will have upon engineering education. One which has already been touched upon is, however, already apparent, namely, the probability that we shall have to rebuild the faculty to a large extent, as many of the teachers that have entered government or private service probably will not return.

The lessons of the war will also effect to some degree the content of the curriculum in its immediate relation to the problems of industry and of the government. Just what these changes will be is not as yet clear, but they will probably tend to bring the colleges into closer relation with industry and the problems of the state and they will tend to require a greater efficiency in teaching than has as yet been reached in even the best of technical schools.

For it should be remembered that whatever opinions may have been held by educators or others concerning the merits of professional education it was to professional men and professional colleges that the Government turned in the hour of need; and it is already clear that the hope for the future lies in professional training. The many criticisms that have been directed against technical colleges have been fully answered and the work of these colleges fully justified by the events of the past year. We may look forward into the future, therefore, with great hope, for after this struggle is over, there will be a demand for engineering education

such as has not been seen before. A watchful study should be made of the important changes that will affect technical education. It is not enough that we do all in our power to help in the present great emergency, we must prepare to adapt ourselves to the changes that are sure to come when the conflict is over.

Respectfully submitted,

DEXTER S. KIMBALL,

Acting Dean of the Sibley College of Mechanical Engineering.

APPENDIX XII

REPORT OF THE DIRECTOR OF THE SUMMER SESSION

To the President of the University:

SIR: I beg to submit my twelfth annual report as Director of the Summer Session, July 9 to August 17, 1917. As for the last two years, the entire work for the Summer Session of six weeks has been carried on in both the College of Agriculture and the other colleges of the University represented as a unit, and so arranged as to prevent duplications of courses. All work in the College of Agriculture was under the direct supervision of Professor George A. Works.

ATTENDANCE STATISTICS

Teaching staff, 153.

Students in Summer Session, except in Agriculture, 919.

Students in College of Agriculture, Summer School, 406.

Total attendance excluding duplicates, 1239. Of these 258 attended Cornell the following winter; 563 had been in attendance in previous years.

There were 255 graduate students of whom 40 hold Cornell degrees.

Six hundred and twenty-five students came from New York State and 614 from 36 other states and 15 foreign countries.

In common with the rest of the University the Summer Session was affected by the war. Several of the staff appointed in January resigned their appointments to enter government service, and there was quite a falling off in the attendance of students. This was marked in the Departments of Mathematics, Economics, Physics and Chemistry, the departments in which Summer Session attendance has always included a considerable number of our own undergraduates, and where a reduced attendance was expected. The loss of sixty per cent in the Department of German was natural. There was an increase in the number of students of psychology, English, French, Spanish, and public speaking.

Perhaps the most important matter of general interest is the steadily increasing number of courses given by the State for the training of public school teachers. This year, for example, a very full course of training for teachers of physical education was inaugurated. It is likely to be further developed and extended in the future. I regard this as natural and proper. The Smith-Hughes Law provides funds for the training of teachers in vocational subjects, and it is natural

that the State college should undertake the training of such teachers. Much of this training must be done during the summer. With the development of the Department of Education in the College of Agriculture, more courses will naturally be called for in the summer. Biology and botany are now given in the State college and it is to be expected that zoology will soon be grouped with them, and probably other closely related work in science.

It is manifestly impossible, even if it were wise, to maintain in the College of Arts and Sciences courses which duplicate, or nearly so, work given in the College of Agriculture, particularly in view of the fact that teachers from this state receive free tuition in the State college. It seems to me evident that the range of work which can be carried in the summer in departments of instruction in the College of Arts and Sciences will be smaller than hitherto.

In general, I have kept in mind the direction of the Trustees in establishing the Summer Session that "so far as possible instruction shall be given in all subjects taught in the high schools of the state with special reference to the assistance of the teachers in them."

The housing and proper supervision of young women has become, because of the limited capacitv of the residential halls, a serious problem.

Respectfully submitted,

GEORGE P. BRISTOL,

Director of the Summer Session.

APPENDIX XIII

REPORT OF THE ADVISER OF WOMEN

To the President of the University:

SIR: I have the honor to submit the following report for the year 1917–1918.

The registration for the year has been as follows:

Arts and Chemistry	434
Agriculture	310
Architecture	8
Graduate School	53
Law	14
Civil Engineering	1
Mechanical Engineering	4
Medicine (Ithaca)	12
Medicine (New York City)	30
	866
Duplicates	20
Registration	846

The total attendance of women students for the year (excluding duplicates) was 846, an increase of 59 over the preceding year. The registration in Ithaca was 816.

The subjoined table shows the attendance of women students during the past five years and also the distribution among the colleges.

Year	Arts	Ag.	Grad.	Law	C.E.	M.E.	Arch.	Med.	Total	Dupl.	Net
1913–14	244	213	56	2	–	–	4	25	544	10	534
1914–15	293	255	62	4	–	–	2	29	645	15	630
1915–16	345	290	73	7	–	1	3	27	746	13	733
1916–17	386	299	66	10	–	2	7	32	802	15	787
1917–18	434	310	53	14	1	4	8	42	866	20	846

The registration of women for the year, as shown by colleges and classes, has been as follows:

ARTS		
1918	103	
1919	109	
1920	96	
1921	117	
1922	5	
Spec.	7	
	437	
Duplicates	3	
		434
AGRICULTURE		
1918	65	
1919	63	
1920	73	
1921	84	
1922	4	
Spec.	24	
	313	
Duplicates	3	
		310
ARCHITECTURE		
1919	1	
1920	2	
1921	2	
1922	1	
Spec	2	
		8
CIVIL ENGINEERING		
1922	1	1
MECHANICAL ENGINEERING		
1920	1	
1921	2	
1922	1	
		4
LAW		
1918	2	
1919	3	
1920	3	
1921	6	
		14
MEDICINE		
Ithaca		
1921	12	12
New York	30	30
GRADUATES	53	
		866
Duplicates	20	
REGISTRATION	846	

The registration of women students during the year has been distributed according to residence as follows:

	1st Term	Percentage	2d Term	Percentage	Capacity
Sage College	168	19.85	162	19.14	171
Prudence Risley Hall	151	17.83	149	17.61	151
Total in Halls	319	37.68	311	36.75	322
At home	81	9.75	84	9.92	—
Approved houses	140	16.57	134	15.89	—
Working for room and board	33	3.83	26	3.07	—
Special arrangement	72	8.51	80	9.44	—
Sorority houses	126	14.81	120	14.16	—
Medical (New York)	30	3.54	30	3.54	—
Total outside Halls	482	57.01	474	56.02	—

	1st Term	Percentage	2d Term	Percentage	Capacity
Withdrew from University ..	—	—	61	7.23	—
Entered Second Term.....	45	5.31	—	—	—
	—	—	—	—	—
Total registration.....	846	100.00	846	100.00	—

The following sororities received permission to live outside the residential halls during the year 1917–1918.

Name	Established	Class	Members	
Kappa Kappa Gamma	1883	1921	8	
		1920	8	
Address—411 Thurston Ave.		1919	8	
Chaperon—Miss Tompkins		1918	5	
			—	29
Alpha Phi	1889	1921	4	
		1920	10	
Address—214 Thurston Ave.		1919	6	
Chaperon—Miss Atkinson		1918	6	
		Spec	1	
			—	27
Alpha Omicron Pi	1908	1921	13	
		1920	5	
Address—308 Wait Ave.		1919	5	
Chaperon—Mrs. Short		1918	6	
		Grad	1	
			—	30
Delta Zeta	1908	1921	5	
		1920	3	
Address—216 Dearborn Pl.		1919	10	
Chaperon—Miss Murray		1918	6	
		Grad	1	
			—	25
Delta Delta Delta	1913	1921	8	
		1920	5	
Address—23 East Ave.		1919	8	
Chaperon—Mrs. Priestley		1918	4	
		Grad	2	
			—	27

Two sororities during the year 1916–1917 tried the experiment of providing housing and personal supervision of their members:

Name	Established	Class	Members	
Kappa Alpha Theta	1881	1922	1	
		1921	4	
Address—301 Wyckoff Ave.		1920	5	
Chaperon—Mrs. McCutcheon		1919	12	
		1918	7	
		Grad	1	
			—	30
Delta Gamma	1885	1921	4	
		1920	10	
Address—213 Dearborn Pl.		1919	6	
Chaperon—Miss Johnson		1918	7	
			—	27

The following new sororities have been established during the year 1917–1918:

Alpha Xi Delta	1918	1921	3	
		1920	2	
Address—Prudence Risley Hall		1919	5	
		1918	7	
			—	17

Name	Established	Class	Members	
Chi Omega	1917	1921	4	
		1920	1	
Address—Prudence Risley Hall		1919	8	
		1918	5	
			—	18
Kappa Delta	1917	1921	5	
		1920	6	
Address—322 Wait Ave.		1919	8	
Chaperon—Mrs. Scott		1918	1	
			—	20
Sigma Delta Phi	1917	1921	4	
		1920	7	
Address—208 Dearborn Pl.		1919	2	
Chaperon—Mrs. Hotchkiss			—	13

RESIDENTIAL HALLS

The problem of housing eight hundred and sixteen young women is unsolved and continues to present serious difficulties.

Without question, provision should be made for the erection of a system of dormitories similar to the present system of residential halls for men students. Any other solution of the problem must be temporary and more or less unsatisfactory. Whether the separate housing of organized groups should be given permanency is at present a question.

The most difficult work of the Adviser of Women involves the interpretation of the University point of view toward extra-curricular activities and the presentation to the student that college discipline and training is a business rather than a diversion. I do not undervalue social training, but in our University community, it should be of secondary importance and the general tone should be academic.

Mr. President, the fundamental fact insisted on by you — that women have the same rights in the University as men — has guided me during my administration. This controlling fact throws the ultimate responsibility for the success or failure in residential halls, sorority houses, lodging houses, etc. upon the individual student. The student who makes her University work a negligible part of her academic life and who spends a large part of her time in extra-curricular activities is inefficient and her inefficiency is a perversion of the business of students and of the functions of the University. Students of this type may be found in a dormitory, a lodging house, or in a sorority house, and they should not be permitted to remain in the University without thorough and effective work.

The vital question concerning the residential halls, sorority houses, and lodging houses is a question of *standard* rather than of *residence*. I believe this standard involves simplicity in living, the encouragement of fidelity to duty, and moderation in all things.

If it were possible to place one of the large groups under the supervision of a Cornell graduate with social qualifications who would be first of all loyal to the University standards, I am confident that this group could be made a real center of life and uplift to the entire student body and at the same time could be made to exercise a marked influence upon certain social standards and social practices at present existing among the conspicuous minority.

I have not hesitated to endorse the separate houses for organized groups as a temporary solution of the housing problem. The plan is more or less successful in other universities; congenial and organized groups are brought together under established standards of living; and the upper class woman is responsible for the scholarship and conduct of the under class woman of her special group. Furthermore, the unit is more easily handled than the mass when there are included young persons of college age who have recently left the home with its personal care and sympathy, and who for the most part lack disciplined initiative or co-operation under leadership. Finally, in the group, academic work and social activities can be arranged in such a way that the girls' health, scholarship, and social life are checks one upon the other to maintain the maximum efficiency.

ARRANGEMENTS FOR RESIDENTIAL HALLS, 1916–1917

1. Seniors and Freshmen in dormitories.
2. Sophomores in dormitories.
3. Juniors outside dormitories.

Seniors (half and half) — Sage and Risley.

Freshmen — Sage and Risley — i.e., 150 rooms held for undergraduate women.

Remainder of rooms at disposal of sophomores. Any left after the sophomores were provided for, were open to juniors.

ARRANGEMENTS FOR RESIDENTIAL HALLS, 1917–1918

The following application was received March 20, 1917, in the office of the Adviser of Women:

"The present Junior Class as incoming Seniors present the request that the Senior Class may be permitted to live in one dormitory."

The following arrangement was suggested and approved:

1. All Freshmen (except by special arrangements) shall live in dormitories.
2. Seniors shall live in one dormitory and will be responsible for the conduct of the under class women in the dormitory.
3. Juniors shall live in a dormitory and will be responsible for the conduct of the under class women in the dormitory.
4. Sophomores shall live outside the dormitories in approved houses (except by special arrangements).

The advantages of the above arrangements are that each student may have three years of dormitory life (freshman, junior, and senior years) and will be required to live outside the dormitory one year only (sophomore year).

HEALTH

I beg to refer you to the report of the Treasurer on the work of the Medical Advisers and of the Infirmary.

The yearly report of my medical office has been submitted to Mr. C. D. Bostwick and to Dr. A. T. Kerr.

Under their direction the progressive plan of the health department has produced most encouraging results for our women. All University health questions include women as part of the health problems of the student body, and they

are provided for and receive the same consideration as that given the men students. This broad policy aims to produce vigorous bodies and strong characters, capable of meeting all the physical and mental tests required by the University.

The women students are beginning to accept the teachings stressed by Dr. Kerr: that a knowledge of health laws insures conditions under which the student can do the most and best work, that a maximum vitality produces a maximum efficiency, and that a study of preventable diseases and remediable functional weaknesses is well worth while.

Since January 1918 Dr. Edith H. Gordon has given conscientious, capable, and most efficient help as Assistant Medical Adviser, and I cannot overestimate the value of her service.

BUREAU OF VOCATIONAL GUIDANCE AND RECOMMENDATIONS

The Bureau of Vocational Guidance and Recommendations for the year 1917–1918 consisted of the following committee:

Professor E. G. Merritt, Chairman (absent on war work), Professor D. S. Kimball, Chairman, Professor W. F. Willcox, Dean J. E. Creighton, Dr. A. T. Kerr, Professor G. R. Chamberlain, Professor C. V. P. Young, Miss Flora Rose, Dr. E. H. Matzke, Secretary, Miss Clara Howard, Assistant Secretary.

One hundred and fifty dollars was appropriated for nonresident lecturers.

The speakers invited to address the Cornell women were for the most part engaged in war work or in the industries directly under Federal control. They accented the present conditions due to the war and brought to us messages of great value and rare interest. These lectures extended over a definite period of time, from January 10 to April 8. The following well-known men and women accepted the invitation to come to Cornell.

Miss Elizabeth Burgess, New York State Inspector of Trained Nurses, pointed out the need for college women in the field of nursing.

Mr. Robert H. Treman, of the Federal Reserve Bank, emphasized the great openings in banking as a vocation for women of good health and adaptability to routine work.

Dr. Kristine Mann, Cornell '12, spoke of college women as department store workers. The possibilities of this field of work included research, social service, and sanitation.

Dr. Thomas Storey, of the Bureau of the Military Training Commission, New York State, urged the necessity for women as teachers of Physical Education. The rules and regulations recently adopted by the New York State Board of Education have opened this work for college women.

Dr. Winifred Cullis of London presented in a forceful way the active part English women are taking in the war and pleaded with our women to be prepared to meet America's demand for leaders along all lines of service.

Mlle. Clement, of the Women's College of Versailles, gave an interesting talk on the war work carried on by the French women. She placed special stress upon the present need of trained women to meet the conditions of devastated France and the future need of solving the international problems pertaining to vocational work among the women of all nations.

Mrs. J. N. Glenn, Chairman of the New York Home Service Section of the American Red Cross, told of the valuable aid given by volunteers and also of the importance of the case work method of social service. She urged Cornell women to consider the opportunities for patriotic service in the work of civilian relief.

Mrs. L. E. Carson, Cornell '13, spoke of the different forms of advertising as a new profession of particular appeal to women and emphasized especially her own field, the advertising agency where the work divides itself into the production of the advertising matter by the service department and the placing of this material by the business department.

Mrs. Florence Kelly, Cornell '82, took as her subject "Minimum Wage Laws — Why for Women Only?" and because of the present political status of the women of New York State, asked Cornell women to give their support in securing increased wages for women.

FINDINGS AND RECOMMENDATIONS OF THE BUREAU OF VOCATIONAL GUIDANCE AND RECOMMENDATIONS

I beg to call your attention to the letter of Professor Merritt (page 14 of the "Report of the University Faculty to the Board of Trustees in Regard to the Office of the Adviser of Women.") Professor Merritt says: "It is not felt that it would be advisable to establish anything in the nature of an employment bureau, but rather to systematize the collecting of information and recommendations in regard to students and especially to be prepared to give students information as to the best procedure in looking for positions."

This policy will not only give expert guidance, but at the same time will recognize the right of the student to secure authoritative information about the vocation she is planning to enter.

From this viewpoint, the Bureau serves as the connecting link between the aims, inclinations, and attainments of the student and available positions. Again, because of the University representation, the Bureau connects the student with the members of the Faculty, who are experts in the lines of work in which the student is interested. On the one hand, the student remains under the direct control of her teachers, and on the other, the teacher receives aid from the Bureau in giving to the student reliable information regarding different vocations.

In order to give definite information, the Bureau must be able to determine "what vocations are open to college graduates; what natural capacities and acquired accomplishments are necessary for success in each; what opportunities for service and development, and what emoluments are open to those who succeed; what callings are overcrowded and what are undermanned; what callings open a diminishing range of opportunity and what an increasing one; and how to place the possibility of choice within the reach of every student and at the same time ascertain what vocations are open to those students who are graduated from departments that do not train for a specific profession."

SELF-SUPPORTING STUDENTS

At your request, Mr. President, special consideration was given the care of and the provision for the working students, particularly those working four

hours a day for room and board and, at the same time, meeting all University requirements.

This group organized and was well known during the past two years as the *Labor Omnia Vincet Association*. Aside from the social purpose, the club has accomplished two things. First: The standardization of student employment. The young women enthusiastically discussed problems of skilled and unskilled labor; of the student as a wage earner; of her scholarship; of her relation to her employer, etc. and sent out questionnaires to employer and employee. The final draft of a plan of standardization is now before the club for adoption. Second: The establishment of a loan fund for the benefit of the self-supporting women. Miss Lois Osborn, permanent secretary and treasurer of the association, who has assisted me during the past two years made the following report of the fund:

Two Liberty Bonds, each $50	$100.00
Gift of Dorothy Wilson, Liberty Bond	100.00
Promissory note, 116 Oak Av. for Liberty Bond	50.00
Deposit slip, Savings Bank	5.35
Total on hand	$255.35
Expenditures, 1916–1918	55.35
Total receipts, 1916–1918	$310.70

In a letter dated April 22, Mrs. Florence Kelley says in reference to a luncheon given her by the Labor Omnia Vincet organization: "I have talked to several persons about the remarkable and delightful group of girls to whom you introduced me, and every one of them has shared my own feeling of admiration and encouragement at your undertaking and its success. I have not brought away from any other university or college such a sense of refreshment and reinforcement as I brought from Cornell after my recent visit to you."

WAR WORK OF CORNELL WOMEN

I beg to call your attention to the excellent report of the General Secretary giving full details of the mobilization of Cornell women.

Our active war work began in the Spring of 1917. First-Aid classes were started and 150 young women signed for the work. Eighty-two passed the final examinations and received First-Aid Certificates from Washington.

In April, 1917, the Red Cross Chapter in Ithaca officially recognized the Auxiliary formed among Cornell women students. Miss Van Cleef, of the Ithaca Red Cross, in her official report said that the Cornell students were the first to start active Red Cross work in Ithaca.

I cannot praise too highly the patriotic enthusiasm and splendid devotion shown by the young women and their faculty leaders during the past year.

SELF-GOVERNMENT ASSOCIATION

During the year, the Self-Government Association established through its Judiciary Committee, a clean-cut working agreement with the University Faculty Committee on Student Affairs.

The Judiciary Committee, consisting of upper class women elected by the Association, has shown rare tact and judgment in handling serious delinquencies. The hearty co-operation together with the constructive criticisms of this group made it possible to uphold higher ideals and to discourage false standards.

I am indebted to the Chairman of the Faculty Committee on Student Affairs for his invaluable assistance and encouragement.

In closing my second and last report as Adviser of Women, Mr. President, I beg to recall the outstanding facts of my appointment in 1916.

Prior to your call to the position of Acting Adviser of Women, I had received a letter written on behalf of the Federation of Cornell Women's Clubs expressing the hope that if you offered me the advisership, I would accept the office with all the rights and privileges as defined in the resolution adopted by the Board of Trustees in June 1916. I understood, furthermore, that I should meet Alumnae approval if I were able to strengthen the administrative and academic sides of the office through a close cooperation with you, the Deans, and the Faculties, especially the Faculty of Arts and Sciences.

If, under your personal guidance and supervision, I have been of some assistance to you and to the women of Cornell, I shall not regret the two years in this office.

My gratitude is due the Deans of the several colleges for their warm support and co-operation; and to you, Mr. President, I beg to express my deepest appreciation of your sympathetic and patient consideration of my many difficult problems.

Respectfully yours,
EDITH HEDGES MATZKE,
Adviser of Women.

APPENDIX XIV

REPORT OF THE REGISTRAR

To the President of the University:

SIR: I have the honor to submit herewith my twenty-second annual report as Registrar of the University. The report covers the academic year 1917–1918, including the Summer Session of 1917.

THE YEAR

	Days in Session	Sundays	Holidays	Vacation	Total
First term, Sept. 24–Jan. 26	98	16	1	..	115
Christmas vacation, Dec. 22–Jan. 1	..	..	..	11	11
Second term, Jan. 28–May 22	99	16	..	..	115
Summer vacation, May 23–July 7	..	..	..	46	46
Summer Session, July 8–Aug. 16	35	5	..	..	40
Summer vacation, Aug. 17–Sept. 22	..	..	..	37	37

All vacation periods except at Christmas were eliminated on account of war conditions.

ATTENDANCE FOR THE YEAR 1917–1918

Dept. & Coll.	Graduate			Arts and Sciences			Law			Medicine			Agriculture			Veterinary		
Degrees	A.M., Ph.D., M.M.E., Etc.			A.B., B.Chem.			LL.B.			M.D.			B.S.			D.V.M.		
Classification	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Graduates	226	52	278	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Class of 1922	...	...	...	8	5	13	1	...	1	...	...	...	11	4	15	...	...	...
Class of 1921	...	...	...	288	113	401	77	6	83	63	13	76	210	83	293	19	...	19
Class of 1920	...	...	...	231	95	326	50	3	53	37	17	54	186	69	255	21	...	21
Class of 1919	...	...	...	171	106	277	34	3	37	25	5	30	180	63	243	8	...	8
Class of 1918	...	...	...	136	101	237	15	2	17	27	4	31	153	67	220	60	...	60
Specials	...	...	...	1	7	8	2	...	2	15	4	19	19	23	42	...	...	...
Totals	226	52	278	835	427	1262	179	14	193	167	43	210	759	309	1068	108	...	108
Duplicates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Net Total	226	52	278	835	427	1262	179	14	193	167	43	210	759	309	1068	108	...	108
Third Term Grad.	34	5	39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Third Term Agr.	...	...	...	...	...	...	...	...	...	...	...	...	48	6	54	...	...	...
Third Term Mech. Eng.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Third Term Arch.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Short Winter Agr.	...	...	...	...	...	...	...	...	...	...	...	...	151	39	190	...	...	...
Summer (1917)	7	20	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	267	77	344	835	427	1262	179	14	193	167	43	210	958	354	1312	108	...	108
Duplicates	30	22	52	...	...	...	...	...	...	...	...	...	31	7	38	...	...	...
Net Totals	237	55	292	835	427	1262	179	14	193	167	43	210	927	347	1274	108	...	108

Dept. & Coll.	Architecture			Civil Eng.			Mech. Eng.			Summer Session			Summer School			Total		
Degrees	B. Arch.			C.E.			M.E.			1917			in Agr. 1917					
Classification	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Graduates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	226	52	278
Class of 1922	6	1	7	25	1	26	93	1	94	...	...	...	...	...	...	144	12	156
Class of 1921	12	2	14	69	...	69	234	2	236	...	...	...	...	...	...	972	219	1191
Class of 1920	28	2	30	68	...	68	159	1	160	...	...	...	...	...	...	780	187	967
Class of 1919	15	1	16	53	...	53	116	...	116	...	...	...	...	...	...	602	178	780
Class of 1918	15	...	15	44	...	44	74	...	74	...	...	...	...	...	...	524	174	698
Specials	7	2	9	...	...	...	10	...	10	...	...	...	...	...	...	54	36	90
Totals	83	8	91	259	1	260	686	4	690	...	...	...	...	...	...	3302	858	4160
Duplicates	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	62	16	78
Net Total	83	8	91	259	1	260	686	4	690	...	...	...	...	...	...	3240	842	4082
Third Term Grad.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34	5	39
Third Term Agr.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48	6	54
Third Term Mech. Eng.	...	...	...	...	...	...	86	...	86	...	...	...	...	...	...	86	...	86
Third Term Arch.	7	4	11	...	...	...	...	...	...	...	...	...	...	...	...	7	4	11
Short Winter Agr.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	151	39	190
Summer (1917)	...	...	...	...	...	...	...	...	...	342	577	919*	75	331	406*	424	928	1352
Totals	90	12	102	259	1	260	772	4	776	342	577	919*	75	331	406*	3990	1824	5814†
Duplicates	7	4	11	...	...	...	83	...	83	173	46	219	7	21	28	331	100	431
Net Totals	83	8	91	259	1	260	689	4	693	169	531	700	68	310	378	3643	1654	5297††

*Includes 86 (16 men, 70 women) registered in both Summer Session and Summer Session in Agriculture.

†Excludes 78 duplicates of regular session.

††Excludes 78 duplicates of regular session and 86 registered in Summer Session and Summer Agriculture.

STUDENTS

The table given on page LV, which shows the attendance for 1917–1918, gives the number of students who have received instruction this year, including those in the 1917 Summer Session, in the 1917 Summer School in Agriculture, those registered up to July 1, 1918, in the 1918 Summer Graduate work, and Third Term Graduate work, in the 1917–1918 Winter Courses in Agriculture, and in the Third Term in Agriculture, the Third Term in Mechanical Engineering, and the Third Term in Architecture, but excluding duplicates, as 5297.

The accompanying table shows the attendance in each course since the opening of the University in 1868.

MATRICULATES

The following table shows that 2046 students have registered during the present year for the first time. The table also shows the method of admission. Students entering for the first time in the Summer Session and in the Summer School in Agriculture are not considered as matriculates, but for convenience are listed in this table.

Graduates	63	Medical (N. Y. City)	55
Advanced standing	180	Summer session (1917)	399
Regents' credentials	476	Summer School in Agr. (1917)	240
School certificates	524	Summer Grad. after July 1, 1917	15
By examination	7	3d Term Agr. to July 1, 1918	13
As special students	46	3d Term Graduate to July 1, 1918	8
Coll. Ent. Board Exams	20		
Total			2046

The small number entering by some of the above methods is due to the fact that two or more methods have been combined in a single case, the student, however, being listed in the group to which the major portion of his entrance belongs.

ADMISSION FROM OTHER COLLEGES AND UNIVERSITIES

The Registrar has charge of all credentials presented by applicants coming from other institutions. This system has given uniformity of action on similar certificates when the applicants enter different colleges at this University.

In the following lists should be included properly a number of cases of special students, who coming from other colleges, would have been eligible for admission to advanced standing. Such students, however, preferred to be admitted as specials. Some later changed to a regular course but are not included in these tables.

The number of students admitted to advanced standing as candidates for the first degree during the past thirty-two years, is, as nearly as may be ascertained, as follows. The former courses in Chemistry, Pharmacy, Medical Preparatory, and Optional have been omitted from the table but the numbers have been retained in the totals.

TABLE SHOWING THE NUMBER OF STUDENTS IN EACH COURSE SINCE THE OPENING OF THE UNIVERSITY IN 1868

	68–69	69–70	70–71	71–72	72–73	73–74	74–75	75–76	76–77	77–78	78–79	79–80	80–81	81–82	82–83	83–84	84–85	85–86	86–87	87–88	88–89	89–90	90–91	91–92	92–93	93–94	94–95	95–96	96–97	97–98	98–99	99–00	00–01	01–02	02–03	03–04	04–05	05–06	06–07	07–08	08–09	09–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18
Graduate School	...	...	...	2	6	11	61	13	23	30	21	9	14	22	36	21	33	35	41	52	69	70	84	133	170	240	185	145	161	166	190	174	205	189	201	197	211	232	239	249	310	309	372	383	382	383	394	482	468	278
*Optional	81	159	164	146	138	133	61	145*	55	62	46	43	30	23	18	59	76	80	133	157	151	110	88	53	46	47	66	77	75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arts and Sciences	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	624	631	680	755	831	795	734	684	705	748	820	902	970	1017	1031	1112	1194	1294	1424	1483	1262
Arts	40	45	41	36	34	27	36	43	33	46	60	69	52	40	33	26	30	33	54	77	98	129	143	171	174	165	152	166	200	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Letters	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	82	80	97	117	99	95	82	85	65	50	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Literature	...	...	...	...	28	31	26	48	51	36	37	26	25	23	14	7	11	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philosophy	28	44	37	25	...	...	12	17	29	9	23	22	22	17	11	14	23	28	58	67	58	57	77	104	111	121	137	155	157	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
History and Political Science	...	...	...	...	...	...	...	...	...	...	...	11	8	13	23	16	23	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mathematics	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Science and Letters	143	206	228	206	56	122	145	201	147	139	152	130	110	107	109	116	106	122	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Science	...	...	...	...	...	...	...	...	...	13	9	12	8	5	6	7	4	7	60	62	72	75	54	94	107	105	131	151	171	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Natural History	14	10	10	14	15	6	16	17	29	20	15	16	9	7	9	14	12	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chemistry	10	4	8	13	10	10	18	16	12	9	6	2	6	8	8	5	12	11	9	9	23	19	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Medical Preparatory	...	...	...	...	...	...	...	...	...	...	...	7	6	11	6	12	11	8	3	9	18	13	10	13	14	6	8	7	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Agriculture	30	24	20	13	15	7	18	17	29	42	41	35	26	17	15	13	20	23	38	45	58	49	52	41	48	45	45	51	68	84	85	88	99	92	114	142	189	230	278	348	415	539	761	967	1263	1462	1670	1704	1565	1068
Mechanical Engineering	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	116	141	168	176	217	254	303	250	221	209	245	467	501	571	661	792	891	964	1060	1096	1081	1127	1162	1186	1073	1020	956	902	927	942	955	690
Mechanic Arts	27	12	24	15	24	38	58	56	54	44	33	29	33	31	34	37	63	69	...	...	...	32	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Electrical Egineering	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28	42	60	83	126	174	218	250	260	332	289	295	243	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Industrial Art	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Civil Engineering	39	59	75	104	97	95	95	82	70	58	43	39	38	49	64	77	93	95	112	111	128	135	137	139	131	120	123	122	152	179	185	203	183	214	252	326	385	425	466	511	569	559	558	539	503	487	480	450	409	260
Architecture	...	...	2	23	21	29	31	32	29	19	16	10	8	8	18	22	29	37	63	69	69	62	52	68	78	97	76	67	51	53	48	43	53	50	53	65	68	81	82	100	133	140	133	138	144	149	163	166	168	91
Law	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55	85	105	122	123	176	197	191	207	239	240	164	178	182	198	224	240	228	222	211	206	225	264	279	328	297	269	245	243	255	193
Veterinary	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	16	23	30	42	51	64	86	110	88	86	82	94	100	105	106	120	131	123	159	157	108
Forestry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	20	23	44	70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Medical	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	278	333	347	433	396	371	406	394	348	320	221	201	179	118	150	141	205	216	205	210
Pharmacy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	9	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total excluding Duplicates	412	563	609	597	539	509	532	542	561	529	505	463	399	384	405	447	575	649	829	1022	1229	1329	1390	1538	1700	1810	1689	1702	1808	1835	2101	2299	2521	2845	3022	3091	3318	3461	3523	3734	3985	4227	4412	4506	4803	5015	5345'	5656	5549	4082
†Summer Session	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	‡115	169	277	272	237	192	403	424	445	424	548	470	718	619	642	755	841	889	987	1030	1053	1098	1126	1142**	1142**	1329	919
Summer Entomology	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17	14	19	11	18	18	20	29	26	30	35	33	26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Summer Sch. in Med. (N. Y. City)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19	18	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Summer Paleontology	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	29	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Winter Agriculture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	61	77	83	60	93	89	83	94	96	121	134	199	248	244	270	364	371	477	451	597	555	549	425	282	190
Winter Veterinary	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	8	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Summer School in Agriculture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	128	223	338	388	445**	445**	382	406
Graduate Work in Summer	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31	107	75	42	11††	...	...
Third Term Agriculture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	47	108	141††	44¶	54
Third Term Graduate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	86	117††	74¶	39
Third Term Mech. Eng.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	86
Third Term Architecture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11

*Includes those registered merely "Optional"; e.g. "Optional Agr.", "Sp. Agr.", etc., are counted in the course to which they belong. The classification of "Optionals" was always vague, and this accounts for the sudden fluctuations in that course which appear in the Catalogue.

†Also counted in courses.

‡Summer Session of 1892.

**The table for 1916–17 includes the 1916 Summer Session and 1916 Summer School in Agriculture.

††Registration to July 1, 1916.

¶Registration after July 1, 1916 and to July 1, 1917.

TABLE SHOWING BY YEARS THE NUMBER AND KINDS OF DEGREES GRANTED BY CORNELL UNIVERSITY

FIRST DEGREES

| | '69 | '70 | '71 | '72 | '73 | '74 | '75 | '76 | '77 | '78 | '79 | '80 | '81 | '82 | '83 | '84 | '85 | '86 | '87 | '88 | '89 | '90 | '91 | '92 | '93 | '94 | '95 | '96 | '97 | '98 | '99 | '00 | '01 | '02 | '03 | '04 | '05 | '06 | '07 | '08 | '09 | '10 | '11 | Feb. '12 | June '12 | Sep. '12 | Feb. '13 | June '13 | Sep. '13 | Feb. '14 | June '14 | Sep. '14 | Feb. '15 | June '15 | Sep. '15 | Feb. '16 | June '16 | Oct. '16 | Feb. '17 | May '17 | June '17 | Sep. '17 | Jan. '18 | May '18 | Total |
|---|---|---

Year	Arts	Phil.	Let.	Sci.	Agri.	Arch.	Civil Eng.	Mech. Eng.	For-estry	Law*	Vet.	Med.	No. of Cases.
1886–87	2	8	1	4	1	4	6	18	..	..	..	..	50
1887–88	6	4	1	1	..	..	11	10	..	..	..	..	37
1888–89	5	..	6	6	1	2	12	21	..	..	..	..	58
1889–90	4	5	6	3	2	1	2	25	..	..	..	..	50
1890–91	8	8	2	4	1	..	14	28	..	..	..	..	65
1891–92	7	9	2	5	2	2	10	52	..	..	..	..	89
1892–93	6	6	1	8	..	6	11	44	..	..	..	..	87
1893–94	5	6	5	8	..	6	6	56	..	..	..	..	94
1894–95	4	2	3	3	2	3	6	44	..	..	..	..	71
1895–96	5	11	4	7	3	3	9	33	..	..	..	..	85
1896–97	10	4	2	4	3	3	11	42	..	12	5	..	100
1897–98	11	6	..	7	9	2	15	41	..	15	1	..	108
1898–99	27	6	1	7	5	3	16	56	2	6	3	2	134
1899–00	28	..	..	1	5	3	25	64	1	7	4	..	138
1900–01	37	..	..	..	4	6	6	64	3	10	2	2	134
1901–02	38	..	..	..	6	2	29	92	5	7	..	2	184
1902–03	33	..	..	..	8	2	24	105	9	12	1	..	194
1903–04	31	..	..	..	9	5	39	112	..	9	1	1	207
1904–05	29	..	..	..	9	5	44	101	..	3	..	..	191
1905–06	39	..	..	..	14	8	36	89	..	1	..	..	187
1906–07	40	..	..	..	19	5	55	86	..	15	..	..	220
1907–08	43	..	..	..	22	10	60	79	..	11	..	..	225
1908–09	37	..	..	..	21	10	53	71	..	5	1	5	203
1909–10	47	..	..	..	41	7	30	88	..	9	..	..	222
1910–11	41	..	..	..	44	8	44	47	..	11	..	..	195
1911–12	36	..	..	..	52	6	38	57	..	7	4	..	200
1912–13	57	..	..	..	76	8	39	44	..	7	1	..	232
1913–14	58	..	..	..	76	5	31	47	..	7	..	..	224
1914–15	70	..	..	..	87	5	42	51	..	7	1	6	269
1915–16	85	..	..	..	94	7	22	53	..	9	4	8	282
1916–17	76	..	..	..	84	9	19	54	..	9	2	10	263
1917–18	64	..	..	..	45	3	19	31	..	12	2	4	180

Of the 180 admitted in 1917–1918, 79 registered as freshmen, 58 as sophomores, 35 as juniors, and 8 as seniors.

During the last thirty-two years there have been admitted from over 500 other institutions of collegiate rank, 4,978 students. The distribution of these students can be seen by reference to the table on page xciii of the Report for the year 1907–1908.

ADMISSION ON SCHOOL CERTIFICATE, REGENTS' CREDENTIALS, AND EXAMINATIONS

The Registrar has charge of the credentials of those entering by school certificate, by Regents' credentials, and by examinations, including the examinations conducted by the College Entrance Examination Board.

During the last sixteen years the number of applicants admitted by school certificate, by Regents' credentials, and by examinations, has been as follows:

	'02_3	'03_4	'04_5	'05_6	'06_7	'07_8	'08_9	'09_10	'10_11	'11_12	'12_13	'13_14	'14_15	'15_16	'16_17	'17_18
Certificate	308	315	317	380	324	465	578	574	524	517	601	587	647	683	605	524
Regents	219	220	238	233	185	244	287	329	311	420	404	476	494	520	544	476
Examination	19	18	27	18	18	41	12	14	8	12	11	6	9	28	9	7
Coll.Ent.Exam.Bd.	11	20	27	29	37	33	23	27	14	18	13	14	27	7	13	20
N. Y. C. Ex	..	..	..	..	29	9	5	..	..	..	..	..	..	..	..	..
Total	557	573	609	658	584	792	905	944	857	967	1029	1083	1177	1238	1171	1027

*No data prior to 1896–1897.

DEGREES

The inserted table gives the number admitted to graduation at the 1918 Commencement as well as those of former years. 19,555 degrees have been conferred, but there are some duplicates between the first and second degrees. One degree (M.D.) was conferred in 1899, but in 1907 was revoked because the candidate declined to accept it. One degree (D.V.M.) was conferred in June, 1905, but owing to a technicality was withdrawn and conferred again June, 1906, while another degree (D.V.M.) was conferred in 1907 but dated as June, 1906. The two degrees (M.D.) listed as February, 1912, were conferred after June, 1911, and before February, 1912, at the dates when the candidates became of proper age. On account of war conditions 17 degrees were conferred on May 1, 1917, and one as of June, 1916. In September, 1917, one A.B. degree and eleven B.S. degrees were conferred as of June 27, 1917. In January, 1918, three M.E. degrees were conferred as of June 27, 1917, and one M.E. as of September 26, 1917. Care has been taken to discriminate between closely allied degrees, but such have been grouped so as to show at a glance the number in each department.

Respectfully submitted,

DAVID F. HOY,
Registrar.

APPENDIX XV

REPORT OF THE SECRETARY OF THE UNIVERSITY

To the President of the University:

SIR: I have the honor to submit the following report for the year 1917–1918:

The only department of the Office of the Secretary that has done other than routine work during the year is that department which has been charged with the keeping of a record of the services performed by graduates and students of Cornell University in the prosecution of the present war. Information for that record has been collected assiduously. A special card index has been made. The cards measure eight by five inches. Each card is designed to carry the record of one person's service. Before reporting the numerical results of this collection, I beg to say that the ordinary difficulty of gathering and assembling in order all the information that ought to go into such a record has been increased by my inability, on account of a dearth of clerical help, to keep a competent assistant continuously engaged on this task throughout the year. New information for the record is still received almost every day, and the work of recording has not yet quite caught up with the accumulation of material. For that reason I can give only approximate figures.

There were in the military and naval service of the United States and Allies on September 1, 1918, more than 5,200 Cornellians. The number of Cornell men in the Army was 3,720, of whom 2,060 were commissioned officers. There were 1,100 in the Navy, and 450 of them were commissioned officers. The names of about 400 other Cornell men are included in the record by reason of their service in civilian occupations directly related to the military

or the naval establishment, such as the inspection of ordnance, technical work in navy yards or mercantile shipyards, and instruction in army schools.

Respectfully submitted,

WOODFORD PATTERSON,
Secretary of the University.

APPENDIX XVI

REPORT OF THE TREASURER ON THE WORK OF THE MEDICAL ADVISERS AND OF THE INFIRMARY

To the President of the University:

SIR: Dr. S. A. Munford, the University Medical Adviser, entered the Medical Service of the United States and has been granted leave of absence from his University duties. For the larger part of the year 1917–1918 he was stationed with the United States Army School of Military Aeronautics at Cornell, and his counsel and experience was of great service to the University. Dr. F. C. Balderrey acted as the Medical Adviser for men students. He was assisted by Dr. J. J. Harrington and Dr. W. B. McWhorter. As Dr. Edith H. Matzke, the Medical Adviser for Women, continued to assist the University by acting also as Adviser of Women, she was assisted during the early part of the year by Dr. Isabel Shannon and later by Dr. Edith Gordon.

The Infirmary accommodated in addition to the registered students, the members of the School of Military Aeronautics, and after June 15, 1918, the members of the Army School for Vocational Training. The total number of patients received at the Infirmary during the year was 1814, as follows:

University students, men	969	
University students, women	298	
School of Aeronautics	544	
School of Vocational Training	3	
		1814
Total number of days service		13057
Average days service		7.2
Average cost per day per student		$2.22
Medical cases	1471	
Surgical cases	343	
		1814
Operations		151
Discharged, cured	1773	
Improved	16	
Not improved	1	
Not treated	4	
Died	6	
In Infirmary June 30, 1918	14	
		1814

Respectfully submitted,

CHAS. D. BOSTWICK,
Treasurer.

APPENDIX XVII

REPORT OF THE LIBRARIAN

To the President of the University:

SIR: I beg to submit herewith the annual report of the University Library from July 1, 1917 to June 30, 1918.

No additions to the library shelving have been made during the year, but, by re-arranging some divisions of the stacks, the additions to the library have been shelved in the logical order of the classification, but this cannot be done many years more without additional shelving. The recent gift to the library of the Wason collection of books about China numbering some five thousand volumes will necessitate additional book stacks before the collection can be properly classified for use. The most economical plan for making additions at this time is to add two floors to the present stacks, one floor on the top of the South stack and one on the top of the West stack, and additional shelving in the corridor leading to the periodical room. This will provide accommodation for several years' additions and thus defer the time when it will be necessary to enlarge the library building.

The larger use made of the lower floors of the library in connection with the periodicals and newspapers has justified the changes made last year. Large volumes of newspapers are now all used on the periodical room floor; not in the general reading room. The removal of the reference books from the large reading room not only gives a more accessible and convenient place to use this material, but also eliminates the disturbance that accompanies the use of such material.

Two courses of lectures, one covering the development of writing, printing, and book making, and the other dealing with the principles of classification, cataloguing, indexing, etc., of books, have been given during the year to about thirty-five students.

ACCESSION DIVISION

The acquisitions to the library have been curtailed, as in all American libraries, by the continued failure to receive books and periodicals from Germany and Austria. German periodicals, in order to keep the sets unbroken, were subscribed for and are being held for future shipment up to and including 1917. The 1918 periodicals are now being negotiated for through a committee of the American Library Association, to whom has been granted the right to import these materials by the United States War Trade Board.

The library has received during the year some three hundred and fifty volumes from the estate of H. B. Lord; eighty volumes from the estate of Professor Charles Babcock; one hundred and eighty volumes left by the will of George W. Harris, Librarian emeritus, which include some rare and valuable incunabula; and one hundred and fifteen volumes from Professor S. H. Gage. The library has also received from the Widener family of Philadelphia an additional volume of the

sumptuous catalogue of the B. A. Widener collection of pictures. Also from Vernon Watney, of Cornbury Park, Oxfordshire, England, the beautiful volume dealing with Cornbury, and from the Hon. Seymour Van Santvoord, a copy of his *House of Caesar*. From yourself and President A. D. White the library has received a large number of gifts that add value to the collection. A list of donors is given in the appendix.

The library has added largely to its collection of books on music during the year, receiving about one hundred and twenty volumes of vocal and orchestral scores. To the collection of books on fine arts about one hundred and twenty-five volumes have been added, and some one hundred and fifty volumes to the books on zoology.

Through the kindness of James I. Clarke, '12, of the Liberty Loan Committee of New York, the library has received a collection of War posters which now number some three hundred pieces, to be added to during the war.

Important additions to the Library:

Grosart. Occasional issues of unique or very rare books. 17 vols.
Cohen. Description historique des monnaies frappées sous l'Empire romain. 8 vols.
Gillieron. Atlas linguistique de la France. 8 vols.
Grueber. Coins of the Roman Republic. 3 vols.
Hooke. Micrographia, 1665.
Drayton. Poems, 1630 and 1619.
Heywood. Love's mistress, 1640.
Annalia Dubrensia, 1636.
Donne. Letters to several persons, 1651.
Simons. Zeno and Mercia, 1648.
Fayrer. Thanatophidia of India.
Gesner. Historiae animalium. 5 vols. 1617–21.
Gray. Illustrations of Indian zoology. 2 vols.
Cuvier, Baron. Animal Kingdom, 16 vols.

Sets of periodicals added to the library:

Burlington magazine. 29 vols.
Australasian Institute of Mining Engineers. Transactions. 16 vols.
Sussex archaeological collections. 53 vols.
Observatory, a monthly review of astronomy. 29 vols.
Gaelic Society of Inverness. Transactions. 27 vols.
Print collector's quarterly. 7 vols.
Societa Toscana de Scienze Naturali. Atti. 35 vols.
Comision del Mapa Geologica de España. Boletin. 37 vols.
Schulthess. Europäische Geschichtskalender. 47 vols.
Le Radium. 11 vols.
Royal Microscopical Society. Transactions. 3 vols.
Real Academia de la Historia. Memorias. 1–14.

During the year the scattered autographs of the library have been brought together into a collection, alphabetically arranged. Where autographs are inseparably connected with books, or documents that belong with a collection, an index sheet is made and added to the main collection, so that it is possible to locate autographs and examples of handwriting throughout the library.

The present size of the library is shown by the following summary. Attention is called to the large increase over the figures of last year due not to unusual growth, since the actual additions, owing to the war conditions, have been smaller

than usual, but to a changed method of counting. It was found that practically all university libraries either bind their pamphlets singly and thus count them as volumes, or if they are bound collectively they count them as if they were bound singly. Cornell University Library has until recent years bound pamphlets collectively and counted them as bound. In this year's count an attempt has been made to conform to the practice of other libraries in order that any comparative statement as to size may be in accord with the facts. One other point needs to be noted in this connection. All large libraries are constantly receiving pamphlets many of which are not regarded of sufficient worth to bind, shelf list, and catalogue. Such materials are usually put into cases and placed on the shelves for any use that may be made of them until such time as they are deemed worth binding and cataloguing. Some libraries count these also, but we have ruled that unless a pamphlet has been bound and catalogued it should not be counted. Such materials are therefore not included.

BOOKS, BOUND PAMPHLETS, MAPS, MSS., ETC.

		Vols.	
General library, exclusive of the following collections		377,367	
Anthon Collection, purchased 1868	6770		
Bopp Collection, purchased 1868	2014		
Sparks Collection, purchased 1872	5717		
White Historical Library, gift 1891	23177		
Zarncke Collection, gift 1893	13000		
British Patent Specifications, 1868–90, gift	3108	53,786	431,153
Fiske Dante Collection, gift 1893		8194	
Fiske Petrarch Collection, 1905		4063	
Fiske Icelandic Collection, 1905		15021	
Volumes of C. U. Theses (deposited)		6421	
Philological Seminary Collection		1076	
Philosophical Seminary Collection		785	
German Seminary Collection		766	
French Seminary Collection		375	
Latin Seminary Collection		329	
American History Seminary Collection		597	
Economic Laboratory Collection		196	
			37,823
General Law Library, gifts and purchases		38615	
Moak Law Library, gift 1893		12500	
Flower Veterinary Library, gift		5295	
Barnes Reference Library, gift		2277	
Goldwin Smith Hall Library		2427	
Stimson Hall Library		1420	
Evans Mathematical Library		417	
Comstock Memorial Collection		103	
Architectural College Library		734	
Miscellaneous Department Collections		4490	
			68,278
N. Y. State Agricultural College Library		11345	
N. Y. State Forestry Library		1180	
N. Y. State Plant Pathology Collection		383	
N. Y. State Entomological Collection		2241	
			15,149
Maps in the Library		884	
C. U. Plans deposited in the Library		195	
U. S. Coast Survey Charts		960	
U. S. Geological Survey Topographical Sheets		2071	

U. S. Geological Survey Folios	207	
British Geological Survey Maps	600	
		4,917
Manuscripts		611
Total books, maps, mss., etc		557,931

CATALOGUE DIVISION

Besides the regular work of classifying and cataloguing the materials as currently received, the work of reclassifying the Spanish and Portuguese language and literature in accordance with the Library of Congress system of classification (modified) has been completed.

During the year the work of changing the catalogue of the books in the Library of Congress from the old galley slips to the printed cards has been completed and the revised cards that had accumulated during the past two years filed, so that this indispensable bibliographical help, numbering some seven hundred and fifty thousand cards, is now up to date.

The list of serials in the library, to be mimeographed for use in the several departments of the University, has been brought up to date and awaits the necessary stencil cutting for final printing.

The Catalogue division has prepared the copy for the list of annual publications of the University and its officers, which forms an appendix to the President's Report, setting forth the results of research and investigations of the year. A list of all such publications from the beginning of the University down to date is also in preparation for printing, thus giving a complete bibliography of such materials during the first fifty years of the University life.

Number of volumes and pamphlets catalogued	9715
Number of maps catalogued	34
Number of Mss. catalogued	6
Number of titles added to catalogue	6502
Number of written cards added	12866
Number of printed cards added	6888
Number of cards added to the L. C. catalogue	57669

READERS DIVISION

The library has been open for use during the year 306 days. On instruction days the open hours are from 8 A. M. to 10:45 P. M.

The number of registered borrowers is 1446; of these 616 are University officers.

The number of books held in reserve for special use and other reasons during the year is 21,739 volumes.

The number of current periodicals kept on file in the periodical room is 758, and the number of bound volumes of sets kept there for reference use is 1530.

The recorded use made of the library shows a falling off from that of last year, as was to be expected. The decrease in the size of the student body and in the amount of instruction given made this inevitable. The recorded use is also kept down by the facilities made for the use of books without any record being made, such as open shelves, department collections, and laboratory use. Such records can therefore never be more than an indication of the use made of the library.

The recorded use for the year is as follows:

Reading Room use	77550
Seminary Room use	2813
Departments and Laboratories	5859
Home use	29018
Foreign loans	365
Total recorded use	115,605
Borrowed from other libraries	114

SPECIAL COLLECTIONS

The Dante collection now numbers 8194 volumes and the Petrarch collection has 4063 volumes. Regarding the Dante catalogue the curator says: "The catalogue of the Dante Collection printed 1898–1900 has already become a far from complete showing of the materials acquired, more than 1200 volumes having been added since its issue. Copy for a supplement to this work is in preparation. The year 1921 will be the sixth centenary of the death of Dante, which occurred September 14, 1321. Italians, in spite of the war pressure, have for four years and more been preparing for the appropriate commemoration of the anniversary. Unless a more suitable offering can be made by the University, the issue during 1921 of this supplement is suggested as one which would be serviceable and would show that the occasion is not forgotten in this place so especially privileged."

The total number of volumes and pamphlets now in the Icelandic collection is 15021. The annual volume of Islandica this year published was an edition of Gisli Oddsson's *Annalium in Islandia Farrago* and *De Mirabilibus Islandiae.* The Runic catalogue, a supplement to the Icelandic catalogue, whose fate in crossing the ocean was for some time in doubt, finally arrived safely and the exchange copies have been distributed.

STACKS DIVISION

The work of caring for the books in the stacks, so essential in any much-used library, has been curtailed by the absence of the superintendent on leave for Y. M. C. A. war work since March 1. Before this date, however, the duplicate materials had been entirely rearranged and grouped into Books, Periodicals, Documents, Pamphlets, etc., to facilitate quick access without cataloguing them.

The annual inventory of books by the shelf division was also interrupted for a time but has since been completed by the employment of special assistants.

The displacement of books in the stacks is always large, depending on the number of users of books there. Such displacement always means a lost book, until found and replaced, and every library carries a number of books that are for the time being lost. Many of these are found later by the inventory and by the return of such volumes as have been carried away without any record being made.

DEPARTMENT LIBRARIES

The relation between department libraries and the general library forms one of the most difficult problems that the American university library has to deal

with. The tendency is to draw away from the general collection materials that are of use to several departments and to keep away from the main library materials seldom used. The fact that research requiring the literature of the subject cannot be done, away from the sets of general periodical literature kept in the main library, in other words cannot be carried on in any department library, indicates that department collections should be limited to books constantly needed in connection with work being done in the several laboratories of the college or department. This is the aim now in nearly all universities where the question has arisen. Experience has shown that the best way to bring about such a relation is to place all department libraries under the supervision of the main library with librarians trained in the general library and appointed in the same way as the assistants in the general library. This would enable the general library at all times to keep in touch with the use made of materials deposited in department libraries and facilitate the flow back and forth of books, as special needs develop in the several departments. This is becoming the practice in large university libraries having several outlying branches.

Volumes deposited in Department Libraries

1.	Architecture	2117
2.	Chemistry	4858
3.	Sibley College	2578
4.	Civil Engineering	4929
5.	Agriculture	7785
6.	Goldwin Smith Hall	2427
7.	Medical College	785
8.	Veterinary College	5247
9.	Entomology	3832
10.	Morrill Hall (Hart Library)	2250

The war conditions have affected the library as little, probably, as any department of the university. The character of the work may have changed somewhat, but the amount remains practically the same. Several places on the library staff have been vacant for some portions of the year, but special assistants have been employed that the work might not fall into arrears, as a library that is not completely classified, catalogued, and shelved, is less efficient.

Respectfully submitted,
WILLARD AUSTEN,
Librarian.

APPENDIX XVIII

PUBLICATIONS, 1916–1918

The University Library is gathering a collection of the publications of all Cornellians. These are kept on the shelves in alphabetic order by University classes. Every Cornellian is asked to send to the Library a copy of every publication that he cares to have in such a collection.

Cornell University. Official publications. v. 7–9. 1915–1918.

—— Addresses at the presentation of the memorial tablet to James Morgan Hart in Sage Chapel, June 3, 1917; edited by Clark S. Northup. Ithaca, N. Y., 1917. pp. 32.

—— Gage memorial. Ithaca, N. Y., 1916. pp. 32.
—— Report of the Faculty committee on the recognition of scholarship. [Ithaca, N. Y.], 1917. pp. 47.
—— Report of the University Faculty to the Board of Trustees in regard to the office of Adviser of Women. [Ithaca, N. Y.], 1917. pp. 15.
Cornell University. Agricultural Experiment Station. Bulletin. No. 377–397. June, 1916–April, 1918. Ithaca.
—— Memoir. No. 9–12. September, 1916–June, 1918. Ithaca.
—— Thirtieth annual report of the New York State College of Agriculture at Cornell University and of the Agricultural Experiment Station established under the direction of Cornell University, Ithaca, N. Y., 1917; transmitted to the Legislature, January 15, 1918. Albany, N. Y., J. B. Lyon Co., 1918.
Cornell University. Library. Catalogue of Runic literature forming a part of the Icelandic collection bequeathed by Willard Fiske; compiled by Halldór Hermannsson. London, Oxford University Press, 1918. pp. 105.
—— Catalogue of the Petrarch collection bequeathed by Willard Fiske; compiled by Mary Fowler. London, Oxford University Press, 1916. pp. 547.
Cornell University. Trustees. Statutes and by-laws, April 21, 1917. [Ithaca N. Y.], 1917. pp. 41.
Cornell architect. v. 2–3. Feb., 1916–Feb., 1917. Ithaca, N. Y.
Cornell chemist. v. 6, 1917. Ithaca, N. Y.
Cornell civil engineer. v. 25–26. Oct., 1916–June, 1918. Ithaca, N. Y.
Cornell countryman. v. 14–15. Oct., 1916–June, 1918. Ithaca, N. Y.
Cornell extension bulletin; A. R. Mann, Director. No. 3–28. July, 1916–April, 1918. Ithaca, N. Y.
Cornell law quarterly; published by the Faculty and Students of the Cornell University College of Law. v. 2–3. Nov., 1916–May, 1918. Ithaca, N. Y.
Cornell reading-courses; Bristow Adams, editor. No. 109–132. Oct., 1916–June, 1918. Ithaca, N. Y.
Cornell rural school leaflet; edited by E. M. Tuttle. v. 10–11. September, 1916–March, 1918. Ithaca, N. Y.
Cornell studies in classical philology; editors: C. E. Bennett and G. P. Bristol. No. 20, 1917. New York, Longmans, Green and Co.
Cornell studies in English; edited by J. Q. Adams, Lane Cooper, and C. S. Northup. Vol. 1–3. 1916–1917. New Haven, Conn., Yale University Press.
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Publications by Officers

In the present list are included the titles of books, pamphlets, and contributions to periodicals, transactions, etc., published by officers and fellows of the University during the period extending from July 1, 1916, to June 30, 1918, with some titles omitted in previous lists.

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—— Housing a city's workers. *Nation's business, v. 4, No. 11:20, 1916.*
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—— "Make haste slowly." *Cornell daily sun, 30 May, 1917, p. 4.*
—— The new spirit in business. *Nation's business, v. 5, No. 2:33, 1917.*
—— The rural press and community service. *Cornell countryman, v. 14:654, 1917.*
—— Some forest history. *American forestry, v. 23:290, 1917.*
—— Speeding up mother nature. *Nation's business, v. 4, No. 12:3, 1916.*
—— Swimmin' and such. *American forestry, v. 22:474, 1916.*
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